Roland

CAMM JET

Sign Maker by Roland DG Corporation

CJ-500

USER'S MANUAL

Thank you for purchasing the CJ-500.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
- Unauthorized copying or transferral, in whole or in part, of this manual is prohibited.
- The contents of this operation manual and the specifications of this product are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform us.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.

Roland DG Corporation

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

The I/O cables between this equipment and the computing device must be shielded.

For Canada

CLASS A NOTICE

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

CLASSE A AVIS

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

NOTICE

Grounding Instructions

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Check with qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn out cord immediately.

Operating Instructions

KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.

DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.

DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, etc.

REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure the switch is in off position before plugging in.

USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.

NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

Table of Contents

To Ensure Safe Use

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

	The △ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. The symbol at left means "danger of electrocution."
	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. The symbol at left means the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. The symbol at left means the power-cord plug must be unplugged from the outlet.

⚠WARNING

Do not disassemble, repair, or modify.
Doing so may lead to fire or abnormal operation resulting in injury.

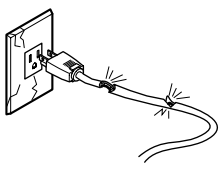
Use only with a power supply of the same rating as indicated on the unit.
Use with any other power supply may lead to fire or electrocution.

Ground the unit with the ground wire.
Failure to do so may result in risk of electrical shock in the even of a mechanical problem.

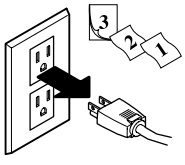
Do not use while in an abnormal state (i.e., emitting smoke, burning odor, unusual noise, or the like).
Doing so may result in fire or electrical shock.
Immediately switch off first the sub power, then the main power, unplug the power cord from the electrical outlet, and contact your authorized Roland DG Corp. dealer or service center.

⚠CAUTION

Do not use with a damaged power cord or plug, or with a loose electrical outlet.
Use with any other power supply may lead to fire or electrocution.

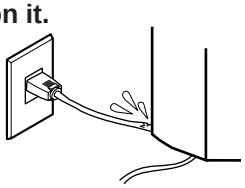


When not in use for extended periods, unplug the power cord from the electrical outlet.
Failure to do so may result in danger of shock, electrocution, or fire due to deterioration of the electrical insulation.

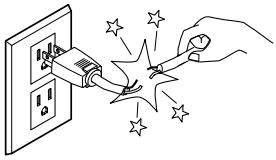


⚠CAUTION

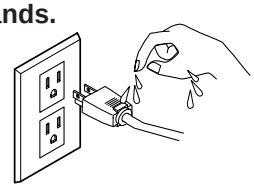
Do not injure or modify the electrical power cord, nor subject it to excessive bends, twists, pulls, binding, or pinching, nor place any object of weight on it.
Doing so may damage the electrical power cord, leading to electrocution or fire.



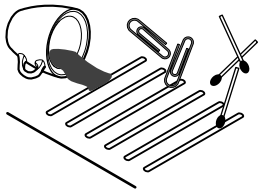
When unplugging the electrical power cord from the power outlet, grasp the plug, not the cord.
Unplugging by pulling the cord may damage it, leading to fire or electrocution.



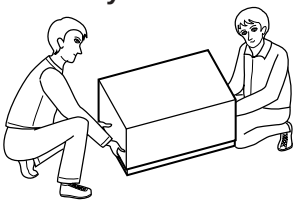
Do not attempt to unplug the power cord with wet hands.
Doing so may result in electrical shock.



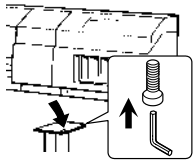
Do not allow liquids, metal objects or flammables inside the machine.
Such materials can cause fire.



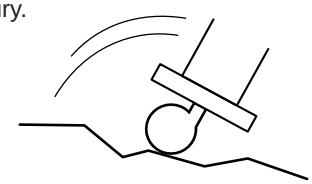
Unpacking, installation, and moving must be carried out by two or more persons.
Failure to do so may result in falling of the unit, leading to injury.



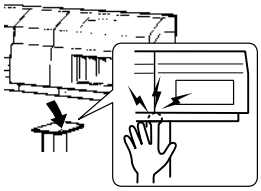
Use the joining screws to secure the unit to the stand.
Failure to do so may result in falling of the unit, leading to injury.



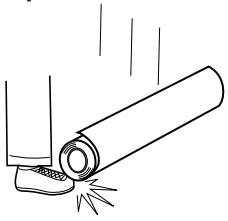
Install in a level and stable location.
Otherwise the unit may tip over and cause injury.



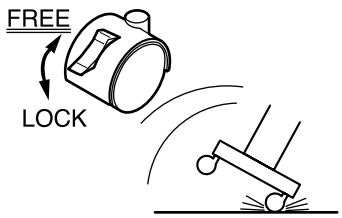
Use care to avoid pinching the fingers when placing the unit on the stand.
Doing so may result in injury.



Roll material must be placed at a predetermined shaft position.
Failure to do so may result in falling of the roll, leading to injury.



Release the caster locks for the stand before attempting to move.
Otherwise the unit may tip over and cause injury.

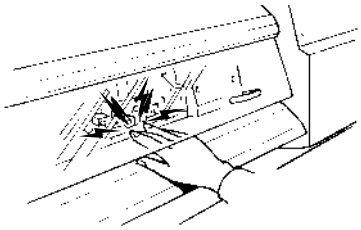


Do not touch the tip of the separating knife with your fingers.
Doing so may result in injury.

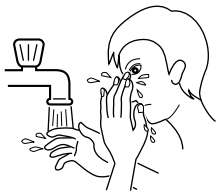
Make sure the power to the unit is off before attempting to replace the separating knife.
Doing so may result in injury.

⚠CAUTION

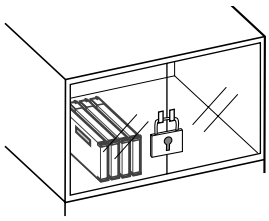
Do not place hands within the space to the front of the unit while in operation.
Doing so may result in injury.



If ink contacts the eyes, flush immediately with water.



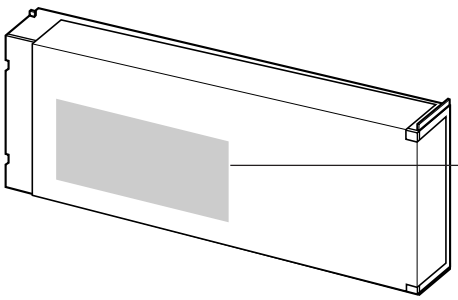
Store ink cartridges out of the reach of children.



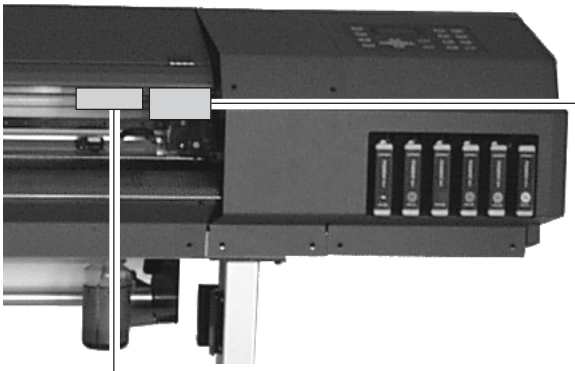
About the Labels Affixed to the Unit

These labels are affixed to the body of this product.
The following figure describes the location and content of these messages.

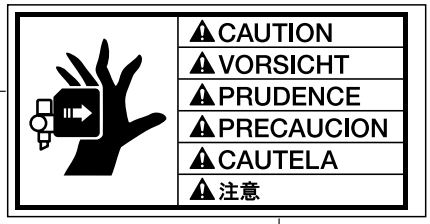
Ink cartridge



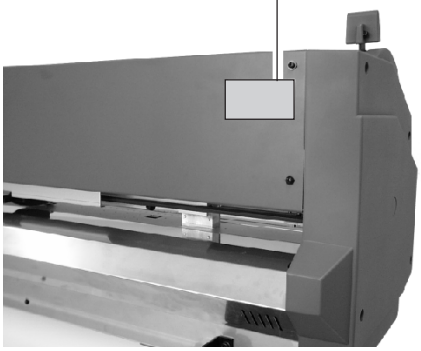
Do not dismantle the cartridge.
Keep out of reach of children.
Do not store the cartridge in high or freezing temperatures.

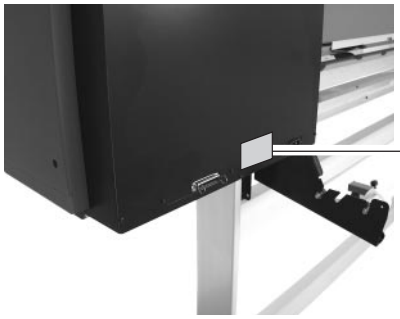


Opening the front cover while printing is in progress causes an emergency stop.
To pause printing for any other reason than an emergency stop, press the [PAUSE] key.
印刷中にフロントカバーを開けると緊急停止します。
緊急停止以外の一時停止は、[PAUSE]キーを押してください。



Do not place hands within the space to the front of the unit while in operation.





Model name
Rating label
Proper voltage required.

In addition to the ⚠**WARNING** and ⚠**CAUTION** symbols, the symbols shown below are also used.

NOTICE : Indicates information to prevent machine breakdown or malfunction and ensure correct use.

: Indicates a handy tip or advice regarding use.

Pour utiliser en toute sécurité

Avis sur les avertissements

⚠ATTENTION	Utilisé pour avertir l'utilisateur d'un risque de décès ou de blessure grave en cas de mauvaise utilisation de l'appareil.
⚠PRUDENCE	Utilisé pour avertir l'utilisateur d'un risque de blessure ou de dommage matériel en cas de mauvaise utilisation de l'appareil. * Par dommage matériel, il est entendu dommage ou tout autre effet indésirable sur la maison, tous les meubles et même les animaux domestiques.

À propos des symboles

	Le symbole △ attire l'attention de l'utilisateur sur les instructions importantes ou les avertissements. Le sens précis du symbole est déterminé par le dessin à l'intérieur du triangle. Le symbole à gauche signifie "danger d'électrocution".
	Le symbole ⃠ avertit l'utilisateur de ce qu'il ne doit pas faire, ce qui est interdit. La chose spécifique à ne pas faire est indiquée par le dessin à l'intérieur du cercle. Le symbole à gauche signifie que l'appareil ne doit jamais être démonté.
	Le symbole ● prévient l'utilisateur sur ce qu'il doit faire. La chose spécifique à faire est indiquée par le dessin à l'intérieur du cercle. Le symbole à gauche signifie que le fil électrique doit être débranché de la prise.

⚠ATTENTION

Ne pas démonter, réparer ou modifier.
Le non-respect de cette consigne pourrait causer un incendie ou provoquer des opérations anormales entraînant des blessures.

Mettre l'appareil à la masse avec une prise de terre.
Le non-respect de cette consigne pourrait entraîner des décharges électriques en cas de problème mécanique.

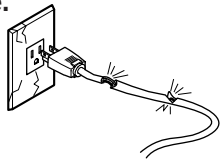
Utiliser seulement avec une alimentation de mêmes caractéristiques électriques que celles indiquées sur l'appareil.
Une négligence à ce niveau pourrait provoquer un incendie ou une électrocution.

Ne pas utiliser si l'appareil est dans un état anormal (c'est-à-dire s'il y a émission de fumée, odeur de brûlé, bruit inhabituel etc.).
Le non-respect de cette consigne pourrait provoquer un incendie ou des décharges électriques.
Couper immédiatement l'alimentation secondaire et ensuite l'alimentation principale. Débranchez le fil électrique et contacter votre revendeur ou votre centre de service de la société Roland DG autorisé.

⚠PRUDENCE

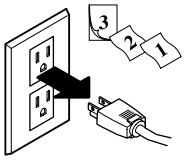
Ne pas utiliser avec une fiche ou un fil électrique endommagé ou avec une prise mal fixée.

Une négligence à ce niveau pourrait provoquer un incendie ou une électrocution.



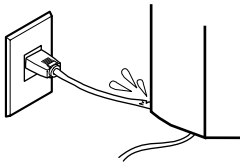
Débrancher le fil lorsque l'appareil reste inutilisé pendant une longue période.

Une négligence à ce niveau pourrait provoquer des décharges électriques, une électrocution ou un incendie dû à une détérioration de l'isolation électrique.



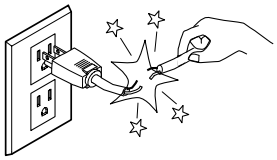
Ne pas endommager ou modifier le fil électrique. Ne pas le plier, le tordre, l'étirer, l'attacher ou le serrer de façon excessive. Ne pas mettre d'objet ou de poids dessus.

Une négligence à ce niveau pourrait endommager le fil électrique ce qui risquerait de provoquer une électrocution ou un incendie.



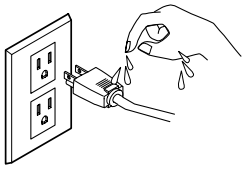
Saisir la fiche et non le fil électrique lorsque vous débranchez.

Débrancher en tirant sur le fil pourrait l'endommager et risquer de provoquer un incendie ou une électrocution.



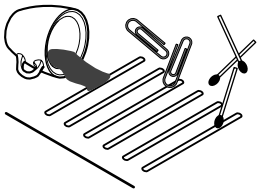
Ne pas essayer de débrancher le fil avec des mains mouillées.

Une négligence à ce niveau pourrait provoquer des décharges électriques.



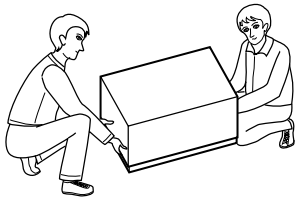
Ne pas introduire de liquide, d'objet métallique ou inflammable dans l'appareil.

Ce genre de matériel peut provoquer un incendie.



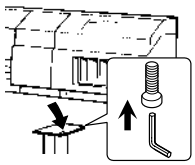
Le déballage, l'installation et le déplacement de l'appareil doivent être effectués par deux personnes ou plus.

Le non-respect de cette consigne pourrait causer des défauts dans l'appareil entraînant des blessures.



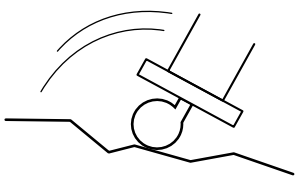
Utiliser les vis fournies pour bien fixer l'appareil sur le support.

Le non-respect de cette consigne pourrait causer des défauts dans l'appareil entraînant des blessures.



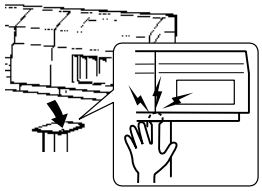
Installer dans un endroit stable et de niveau.

Sinon l'appareil pourrait se renverser et provoquer des blessures.



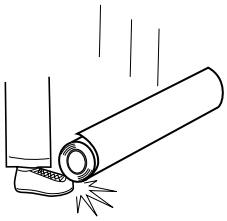
Manipuler avec précaution pour éviter de se coincer les doigts lors de l'installation de l'appareil sur le support.

Une négligence à ce niveau pourrait provoquer des blessures.

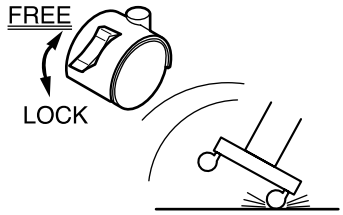


⚠PRUDENCE

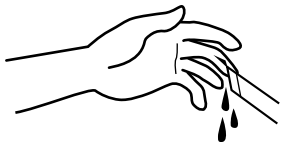
Le rouleau doit être placé quand la barre est en position adéquate.
Une négligence à ce niveau pourrait provoquer la chute du rouleau et causer des blessures.



Débloquer le mécanisme d'arrêt des roulettes du support avant de le déplacer.
Sinon l'appareil pourrait se renverser et provoquer des blessures.



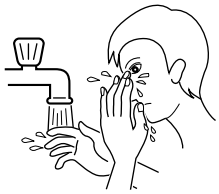
Ne pas toucher à l'extrémité de la lame avec vos doigts.
Vous risqueriez de vous blesser en y touchant.



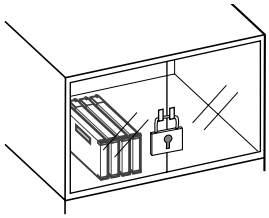
S'assurer que l'appareil est hors tension avant d'essayer de remplacer la lame séparatrice.
Une négligence à ce niveau pourrait provoquer des blessures.

Ne pas mettre les mains dans l'espace du devant quand l'appareil est en marche.
Une négligence à ce niveau pourrait provoquer des blessures.

Si de l'encre entre en contact avec les yeux, rincer immédiatement à l'eau.

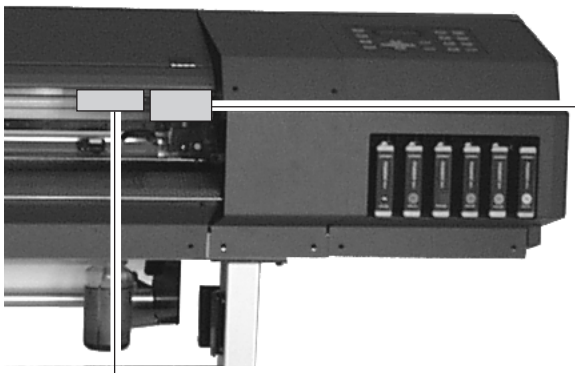


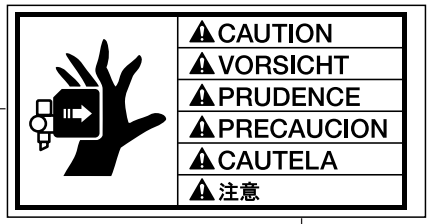
Ranger les cartouches d'encre hors de portée des enfants.



À propos des étiquettes collées sur l'appareil

Ces étiquettes sont collées à l'extérieur de l'appareil.
Les dessins suivants indiquent l'endroit et le contenu des messages.

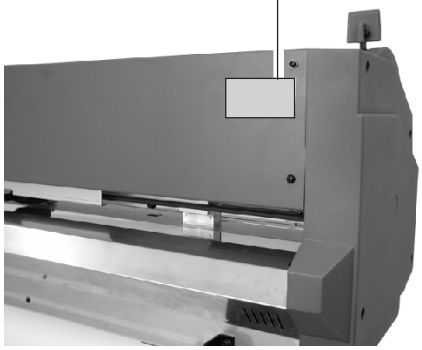


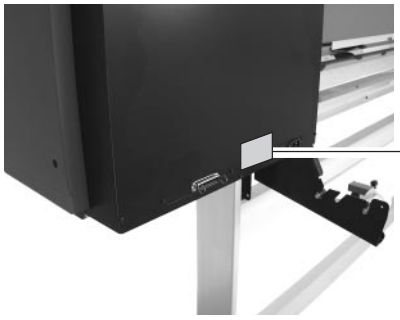


Ne pas mettre les mains dans l'espace devant l'élément quand celui-ci est en marche.

Opening the front cover while printing is in progress causes an emergency stop.
To pause printing for any other reason than an emergency stop, press the [PAUSE] key.
印刷中にフロントカバーを開けると緊急停止します。
緊急停止以外の一時停止は、[PAUSE]キーを押してください。

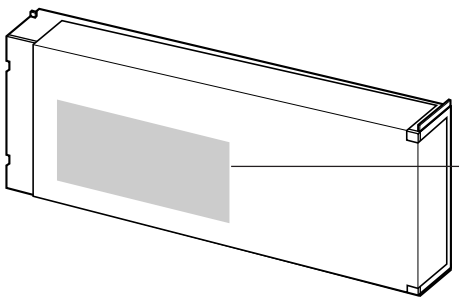
Ouvrir la plaque avant pendant l'impression provoque un arrêt d'urgence.
Appuyer sur "PAUSE" si, pour toute autre raison qu'une urgence, vous désirez suspendre momentanément l'impression.





Nom du modèle
Étiquette des caractéristiques électriques
Utiliser l'alimentation appropriée

la cartouche d'encre



Ne pas démonter la cartouche.
Conserver hors de la portée des enfants.
Ne pas emmagasiner á das températures hautes ou basses.

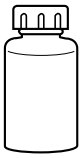
MEMO

Unpacking the CAMMJET

1 Checking Accessories

Check the following to make sure that you received all the items that were shipped with the unit.

Power cord: 1

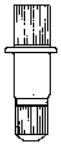


Drain bottle: 1

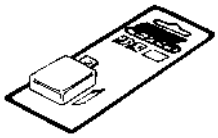
Drain-bottle cap: 1

Screws: 2

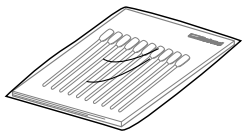
Blade: 1



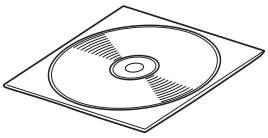
Blade holder : 1



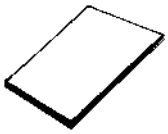
Replacement blade for separating knife: 1



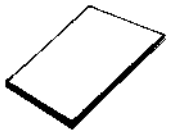
Cleaning kit: 1



Roland COLORCHOICE® CD-ROM: 1



Roland COLORCHOICE® installation guide: 1



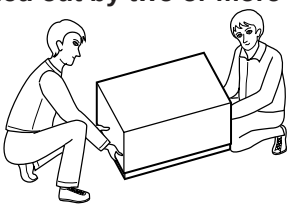
User’s manual: 1

2 Setting Up and Connection

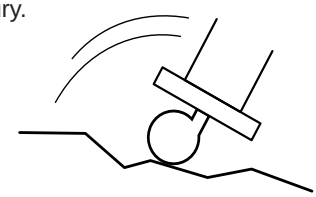
Setting Up

⚠CAUTION

Unpacking, installation, and moving must be carried out by two or more persons.
Failure to do so may result in falling of the unit, leading to injury.



Install in a level and stable location.
Otherwise the unit may tip over and cause injury.



NOTICE

Be sure to install the drain bottle before switching on the power.

Never install the unit in any of the following situations, as it could result in breakdown or faulty operation:
- Places where the installation surface is unstable or not level.
- Places with excessive electrical noise.
- Places with excessive humidity or dust.
- Places with poor ventilation, because the CJ-500 generates considerable heat during operation.
- Places with excessive vibration.
- Places exposed to strong illumination or direct sunlight.

Never step or stand on the stand legs, as doing so may damage them.

Do not place objects on the unit, as doing so may result in breakdown.

For an explanation of how to assemble the unit and the stand (PNS-501), refer to the “ASSEMBLY INSTRUCTIONS” included with the stand.
When using the unit while mounted on a stand, be sure to ensure a sufficient amount of installation space for the unit. The required installation spaces for this model are listed below.

2700 mm (106-5/16 in.) wide, 900 mm (35-7/16 in.) depth, and 1500 mm (59-1/16 in.) high

Connection

⚠WARNING

Use only with a power supply of the same rating as indicated on the unit.
Use with any other power supply may lead to fire or electrocution.

Ground the unit with the ground wire.
Failure to do so may result in risk of electrical shock in the even of a mechanical problem

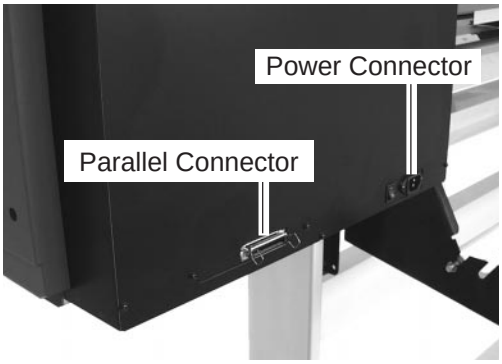
NOTICE

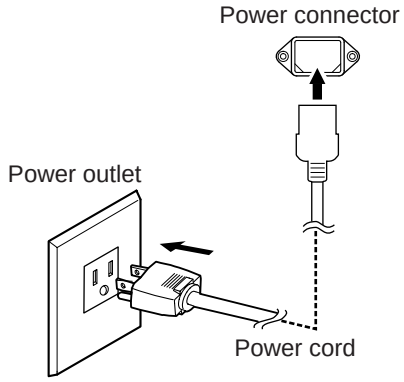
Before connecting the cable, make sure the computer's power and the CJ-500s main power switch are switched off.

Securely connect the power cord, computer I/O cable and so on so that they will not be unplugged and cause failure during operation. Doing so may lead to faulty operation or breakdown.

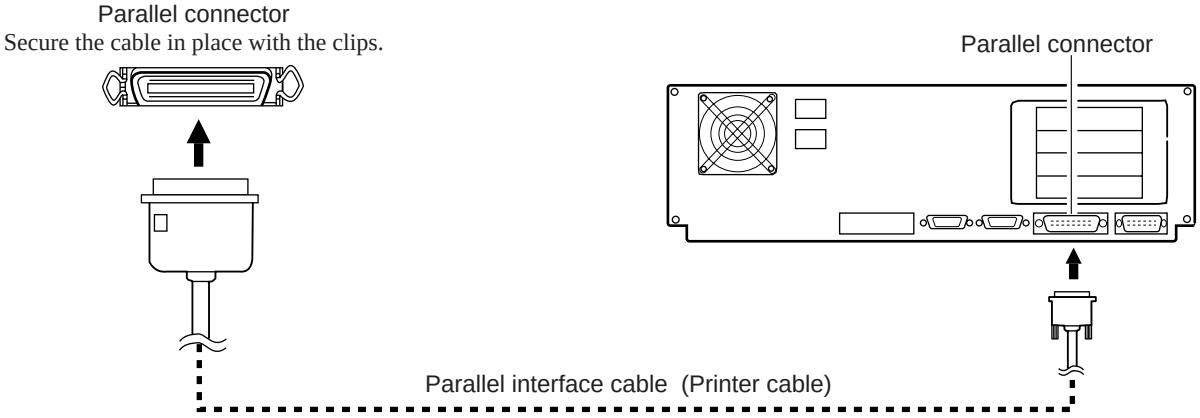
Arrange the power cord and interface connection cable to prevent tripping when moving around the unit.

Rear View



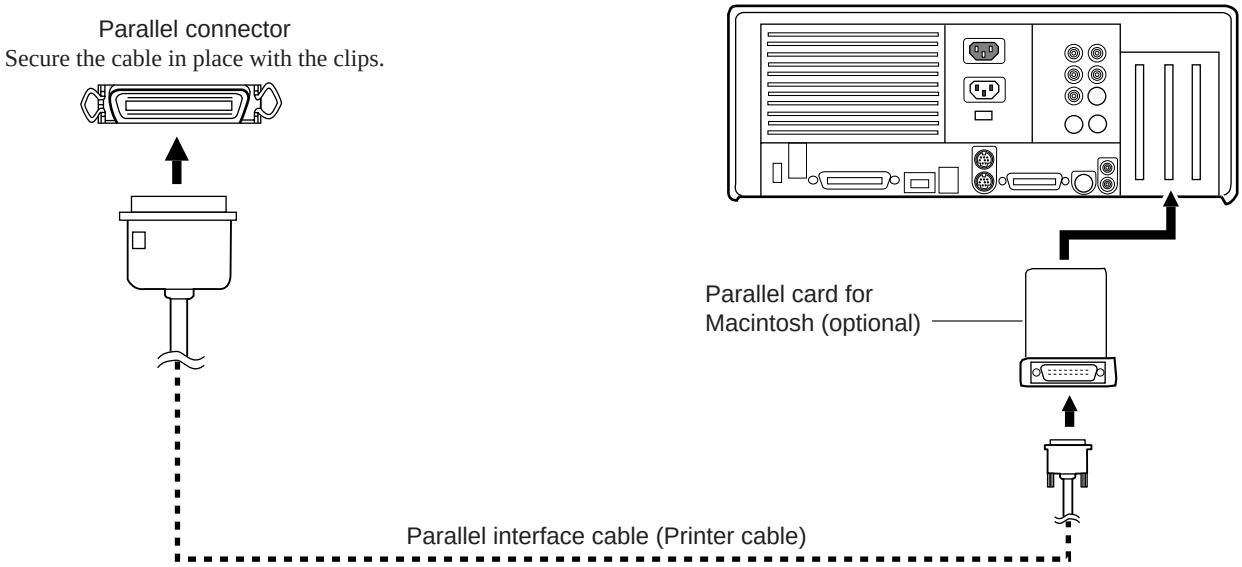


For IBM PC or PC compatibles



* Cables are available separately. One which you are sure matches the model of computer being used should be selected.

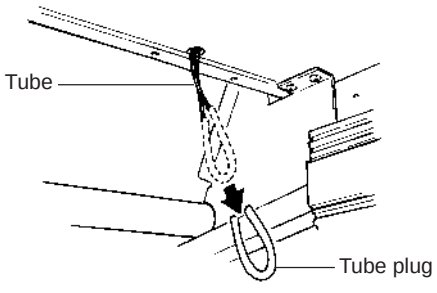
For Macintosh



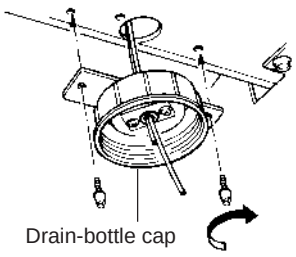
3 Attach the Drain Bottle

*The tube plug and the cap for the drain bottle are required when moving the machine, so do not discard them.

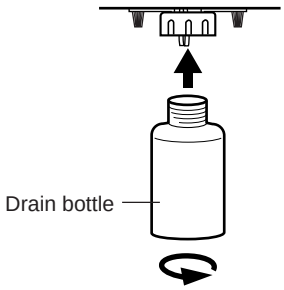
1 Detach the tube plug from the tube tips protruding from the bottom surface of the right-hand side of the unit.



2 Pass the tube through the hole in the drain-bottle mounting cap and align with the threaded hole. Tighten the included screws.



3 Remove the cap for the drain bottle and attach the drain bottle to the unit by screwing it on in the direction of the arrow. Line up the threads on the drain bottle with the threads on the unit, and screw on the bottle without applying excessive force. Leave this mounted unless transporting the main unit, or when it is full.



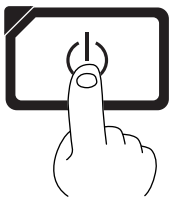
Disposal of Discharged Ink

When the ink is about to exceed the “Upper Limit” line on the drain bottle, or when moving the machine, follow the steps below to discard the ink.

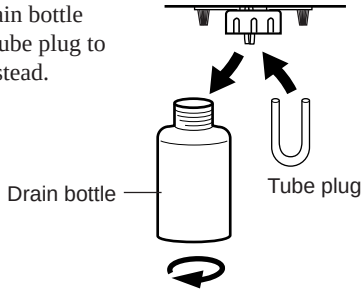
If any ink gets on your hands or clothing, wash it off as soon as possible. Ink stains will become difficult to remove if allowed to dry

1 Press the [POWER] key to switch off the power.

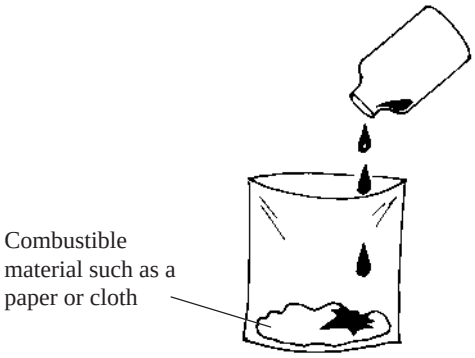
The POWER LED goes out



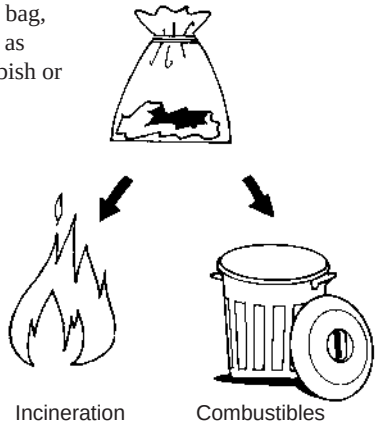
2 Remove the drain bottle and attach the tube plug to the tube tips instead.



3 Put a water-absorbent, combustible material such as a paper or cloth into the plastic bag, and soak up the ink.



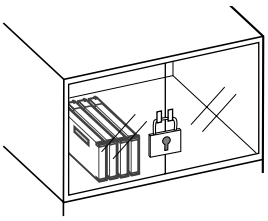
4 Close the plastic bag, and dispose of it as combustible rubbish or incinerate.



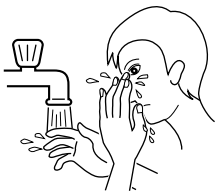
4 Installing Ink Cartridges

⚠CAUTION

Store ink cartridges out of the reach of children.



If ink contacts the eyes, flush immediately with water.



NOTICE

Do not remove any ink cartridges except when shipping the CJ-500.

If ink runs out, replace immediately with an ink cartridge designed especially for the CJ-500 (see "Maintenance -- Replacing the Ink Cartridges"). Do not attempt to refill and reuse an empty ink cartridge.
If an ink cartridge is removed, replace it immediately with a new one.

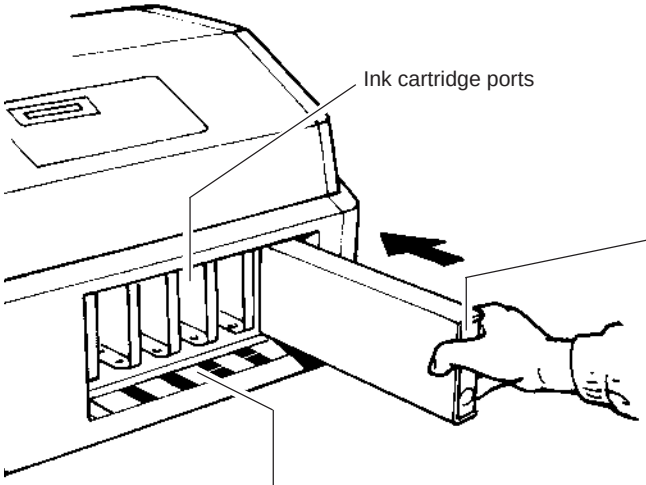
Do not attempt to disassemble an ink cartridge.

Unused ink cartridges should be stored unopened at a temperature of -20°C (-4°F) to 40°C (104°F).

If an ink cartridge is dropped, the shock due to the fall may damage the ink cartridge and make it unusable.

- If any ink gets on your hands or clothing, wash it off as soon as possible. Ink stains will become difficult to remove if allowed to dry.
- Once an ink cartridge has been installed, do not remove it until the ink has been used up. Frequent insertion and removal may allow air to enter the ink tube and result in a drop in printing quality due to dot drop-out.

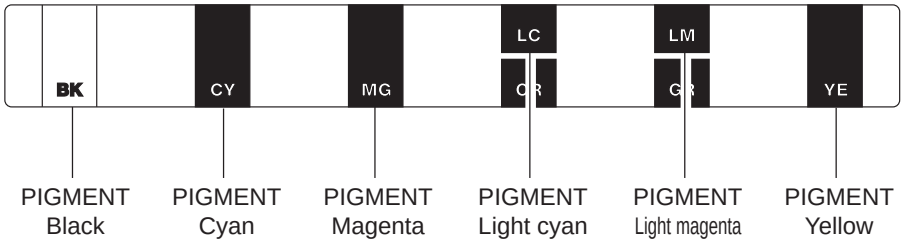
Insert ink cartridges into the ink-cartridge ports. Insert it firmly, as far as it will go.



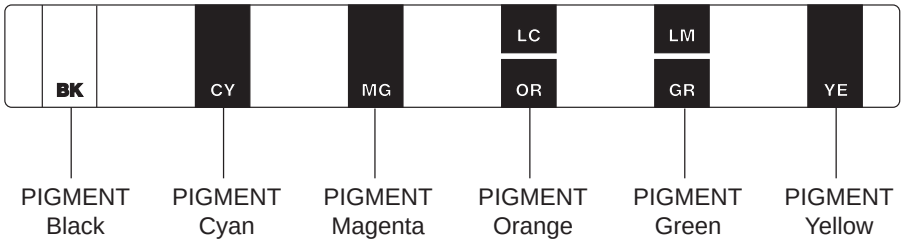
PIGMENT = pigment ink **DYE** = dye ink

When inserting the cartridge, make sure that it is inserted into the correct slot for that color.

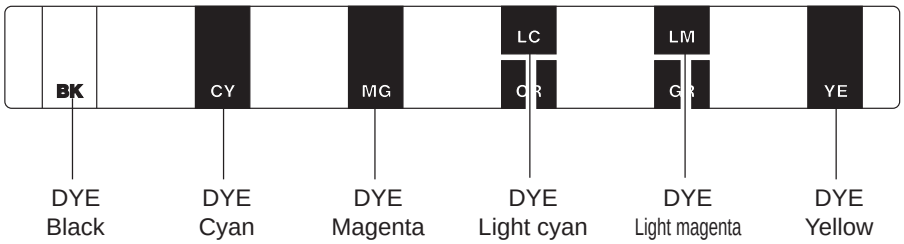
PIGMENT CMYKLcLm (Pigment ink : cyan, magenta, yellow, black, light cyan, and light magenta)



PIGMENT CMYKOrGr (Pigment ink : cyan, magenta, yellow, black, orange, and green)



DYE CMYKLcLm (Dye ink : cyan, magenta, yellow, black, light cyan, and light magenta)



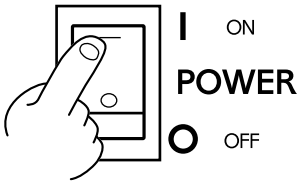
When the power is turned on for the first time, or turned on after removing the ink, the system will execute ink fill. This operation takes several minutes.

5 Power up

Be sure to mount the drain bottle before turning on the power. Refer to section "3 Attach the Drain Bottle".

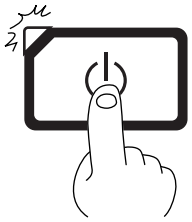
1 When using for the first time turn on the main power switch on the rear of the unit.

* Leave the main power switch on, and turn the power off and on in daily use with the sub power switch on the front of the machine.



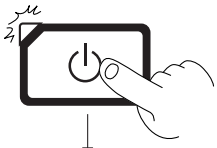
2 Press the [POWER] key on the operation panel.

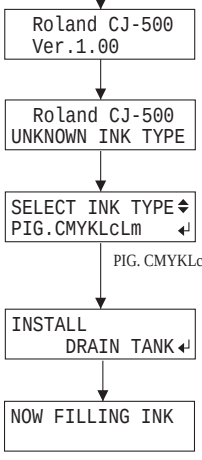
The POWER LED lights up



When the power is turned on for the first time, or turned on after removing the ink

The POWER LED lights up





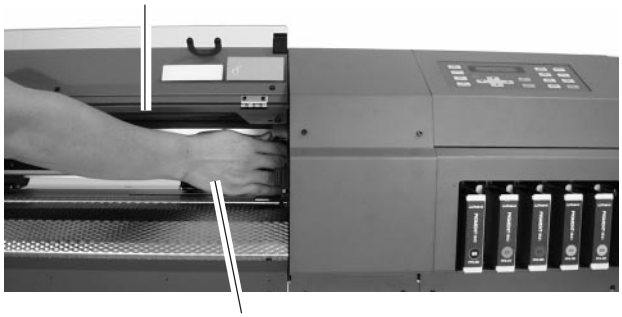
Part Names

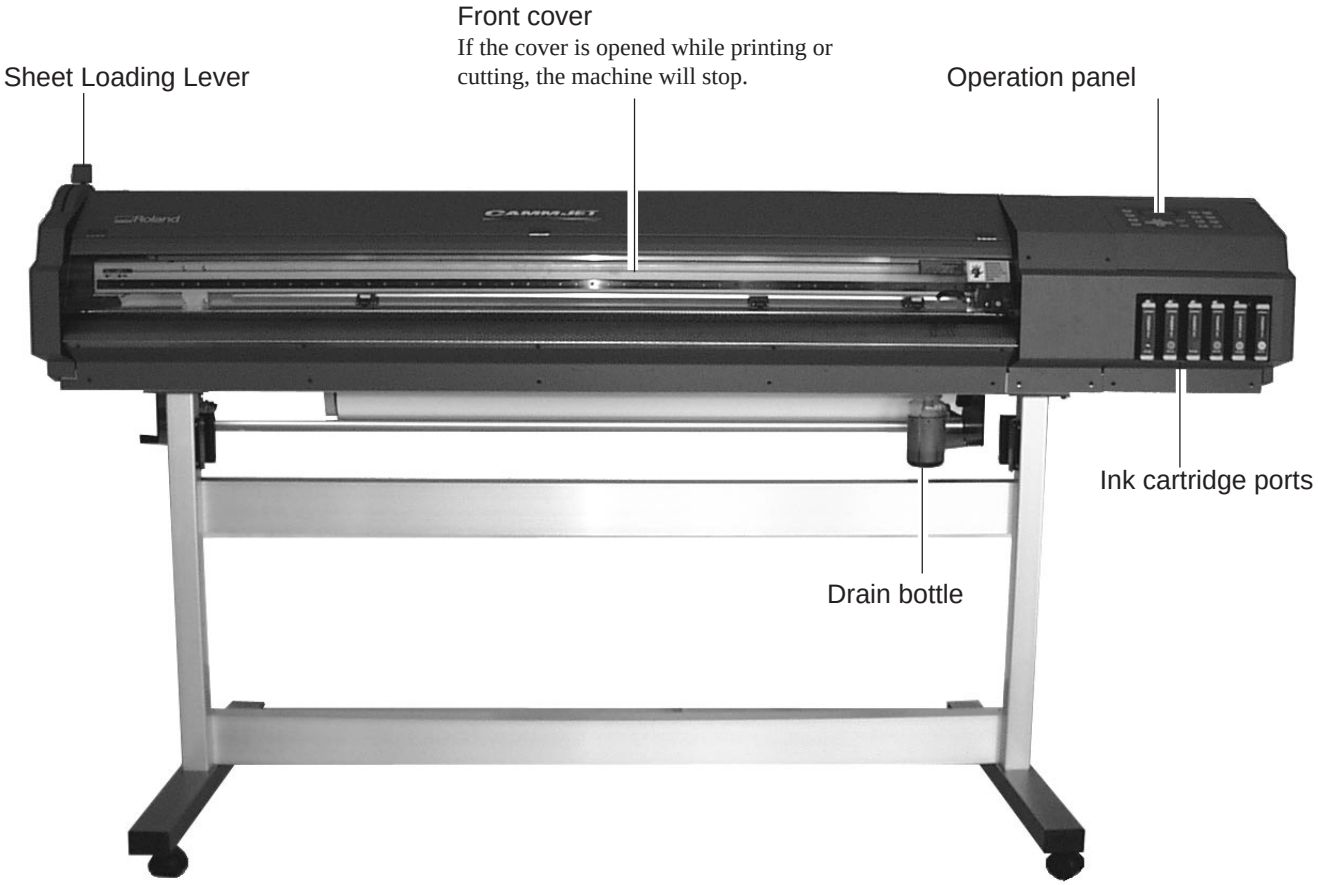
Front View

NOTICE

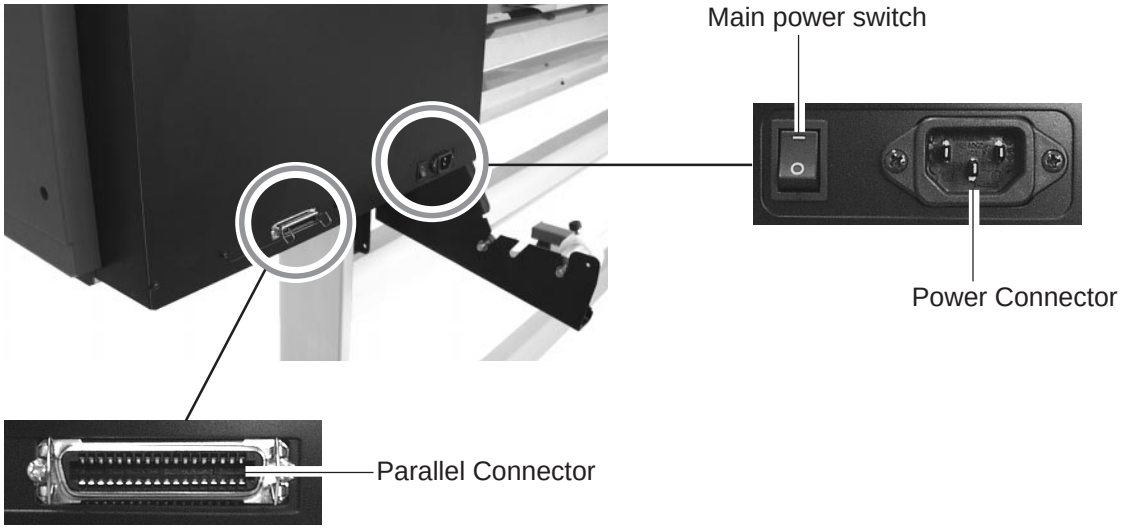
If you leave the printing head being uncapped for a long time (for example, opening the front cover while print head is on the middle of platen), printing heads may get clogged and, in some cases result in unrecoverable damage to the printing head.
When the printing carriage is stopped on the platen, press the [POWER] key to reset the power. The carriage moves and the printing head is capped.

Do not touch the rail or place the hands inside the right-hand cover except when adjusting the height of the printing head. Touching the area shown may cause the fingers to be soiled by grease or ink, and may result in diminished image quality.

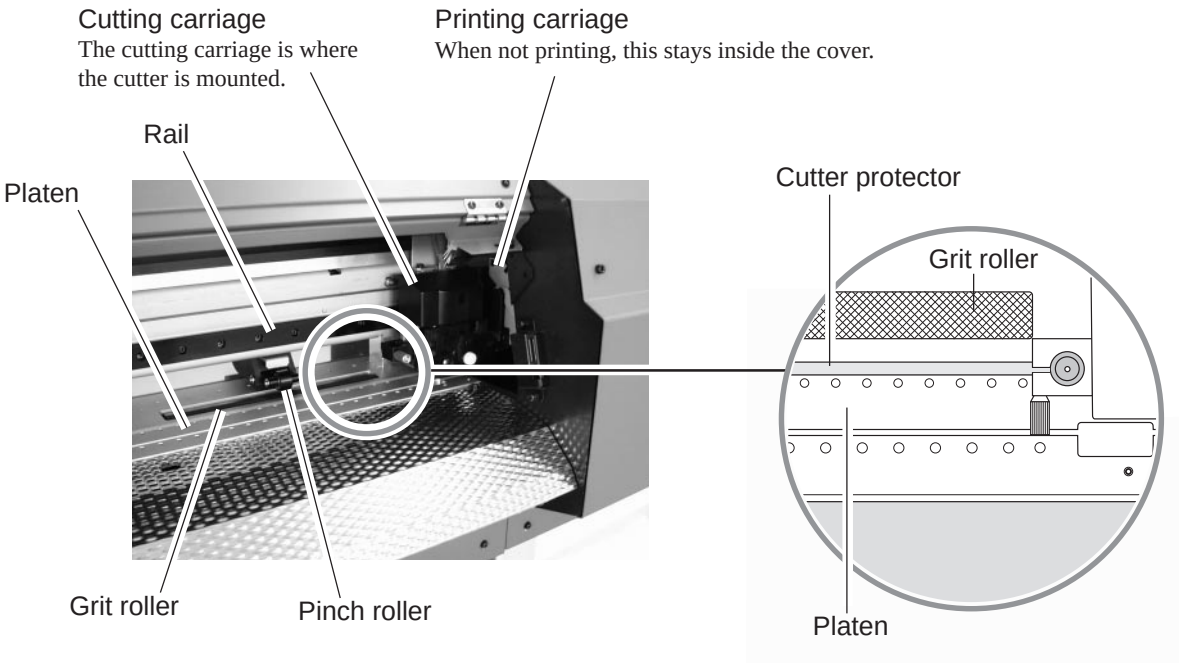




Rear View

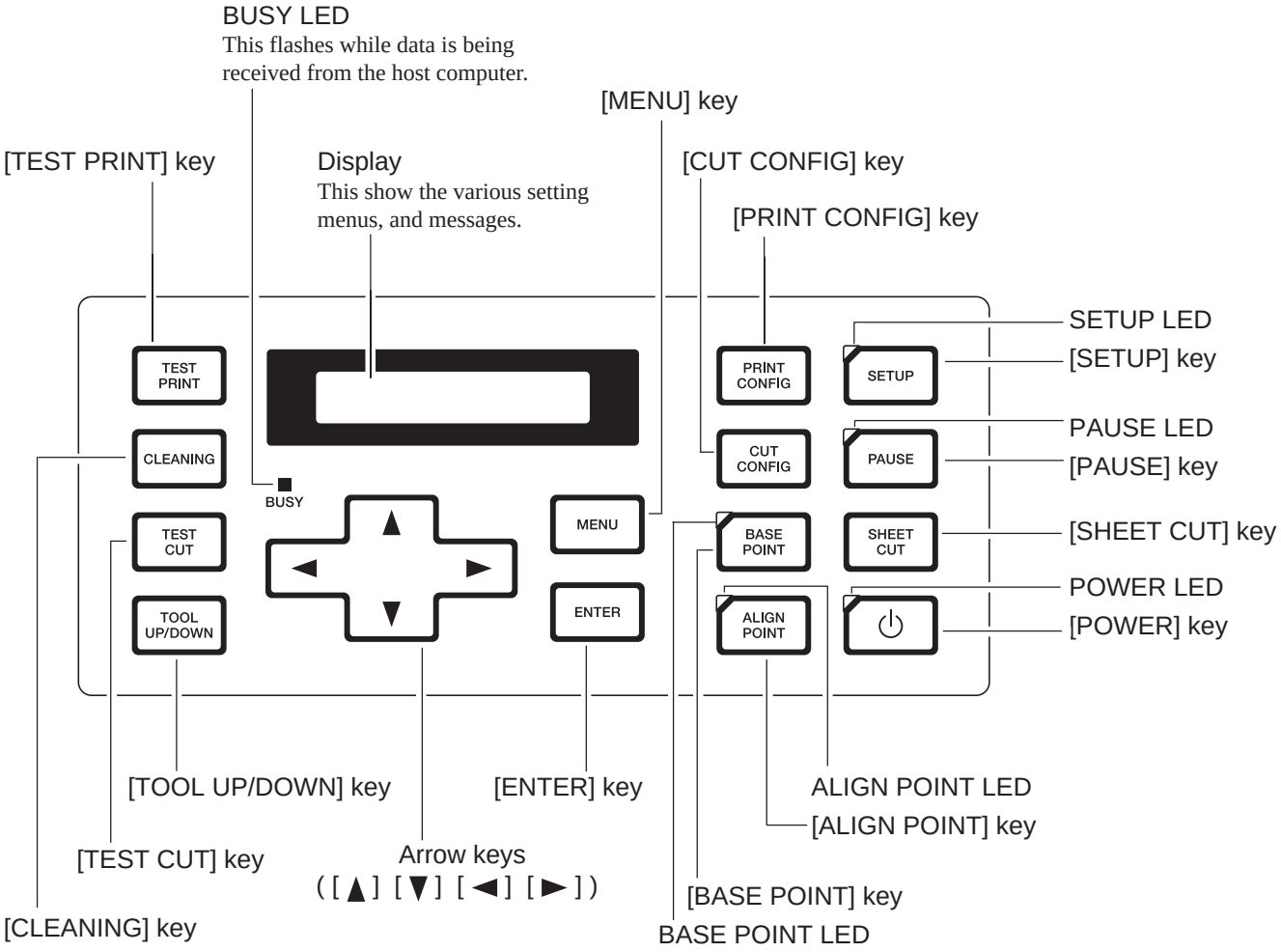


Inside the Front Cover



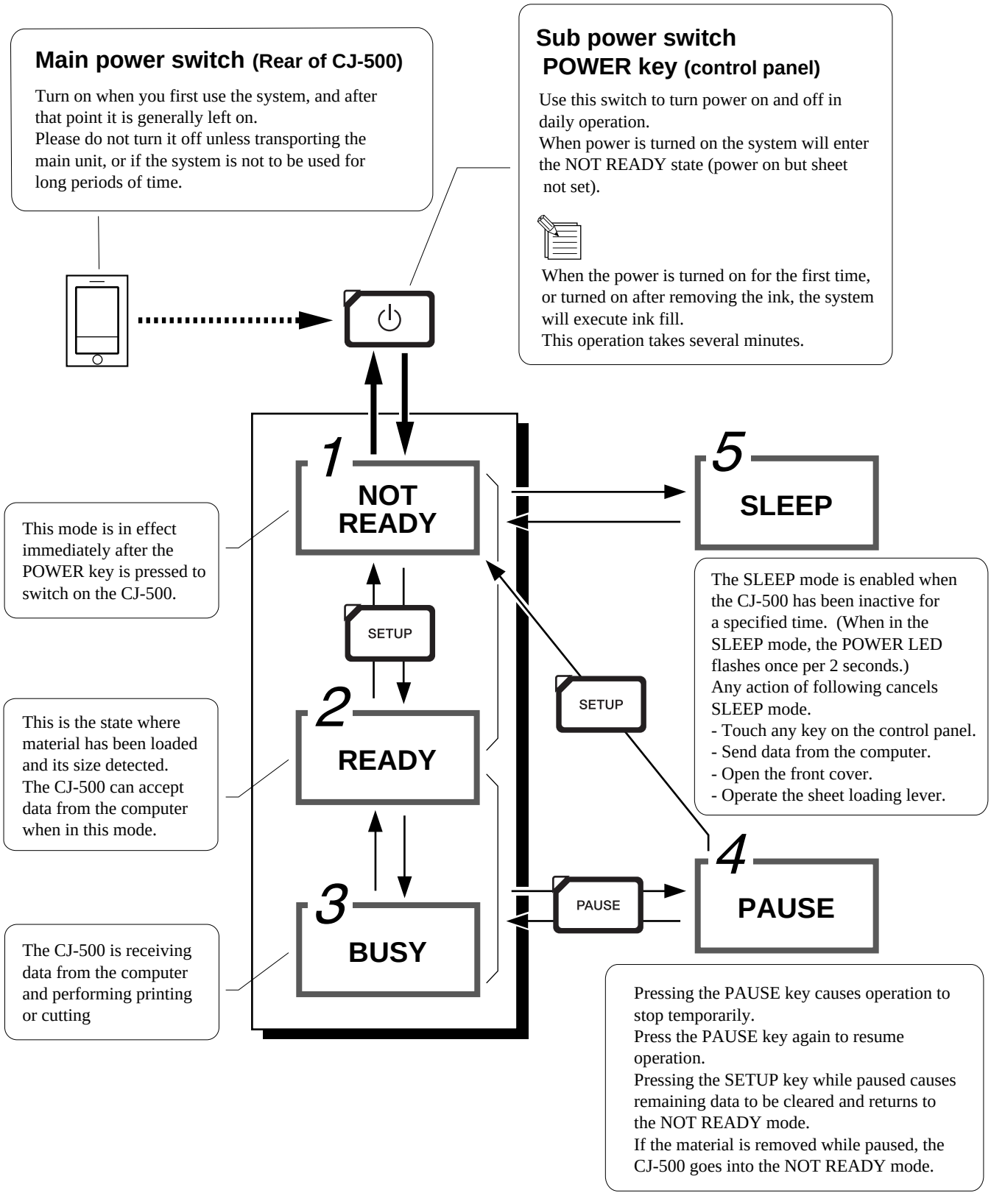
Operation Panel

For more information about the keys, take a look at "Description of Keys".



Five Modes

The CJ-500 has the following five modes (operating states).

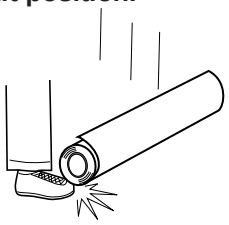


Setup for Printing

1 Loading the Material

⚠CAUTION

Roll material must be placed at a predetermined shaft position.
Failure to do so may result in dropping the roll, leading to injury.



Acceptable material widths

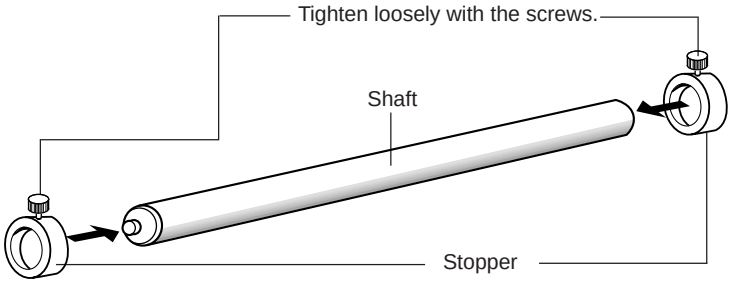
90 mm to 1371 mm (3.5 in. to 54 in.)

*NOTE: when loading material with a width of 90 mm to 430 mm (3.5 in. to 17 in.), set the [EDGE SENSE] menu item to [DISABLE].

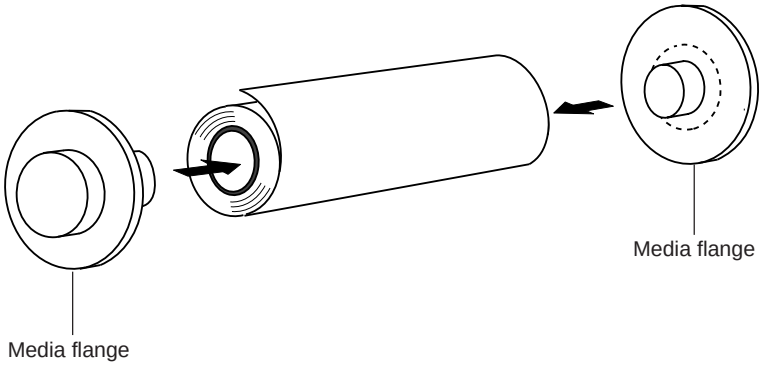
Loading Roll Material

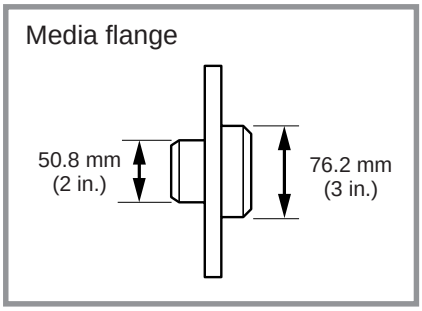
1 Pass the stoppers onto both ends of the shaft.
(The shafts (2 pieces), stoppers (2 pieces), and screws (2 pieces) are included with the stand.)

* When passing the shaft through the stopper, be sure to loosen the screws on the stopper first.

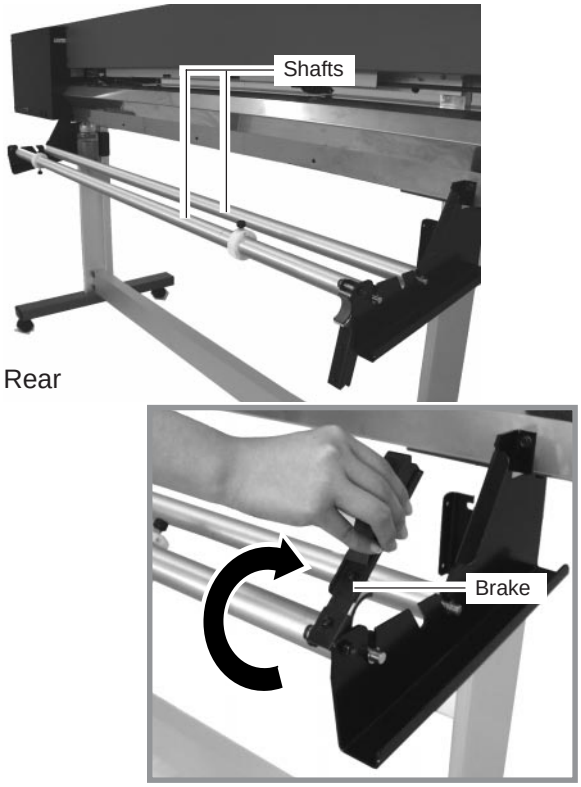


2 Align the media flange with the roll sheet edges, matching the roll sheet center ID.
(The media flange is included with the stand.)

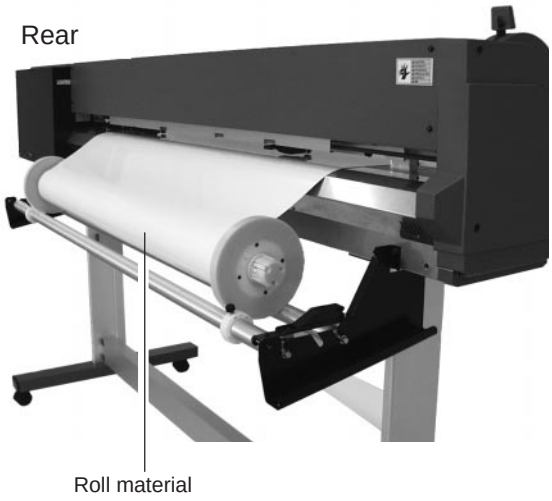




3 Set the two shafts in place and apply the brake.



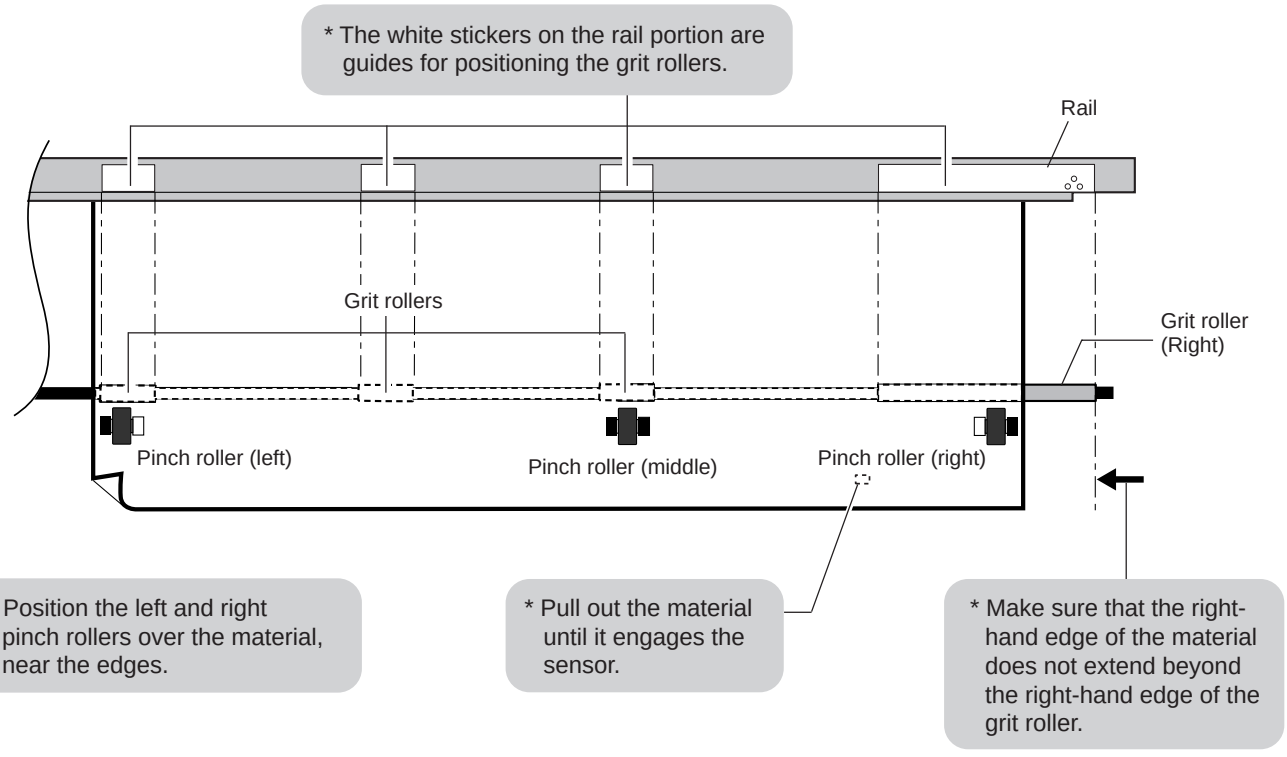
4 Place the rolled material on the shaft.
Pass the end of the material between the pinch rollers and the grit rollers so that it extends from the front of the unit.



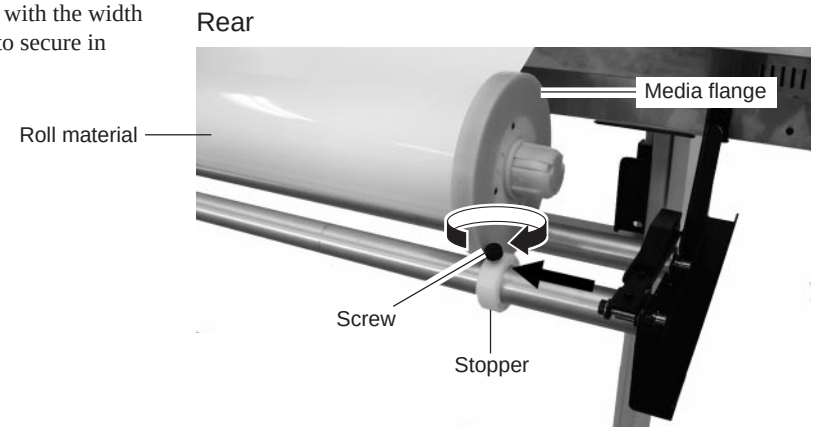
5 When viewed from the front, align so that the left-hand edge of the material is above any of the grit rollers and the right-hand edge is above the long grit roller.

6 Align the material so that it is perfectly straight, and move the left-hand and right-hand pinch rollers so that they are above the grit rollers.

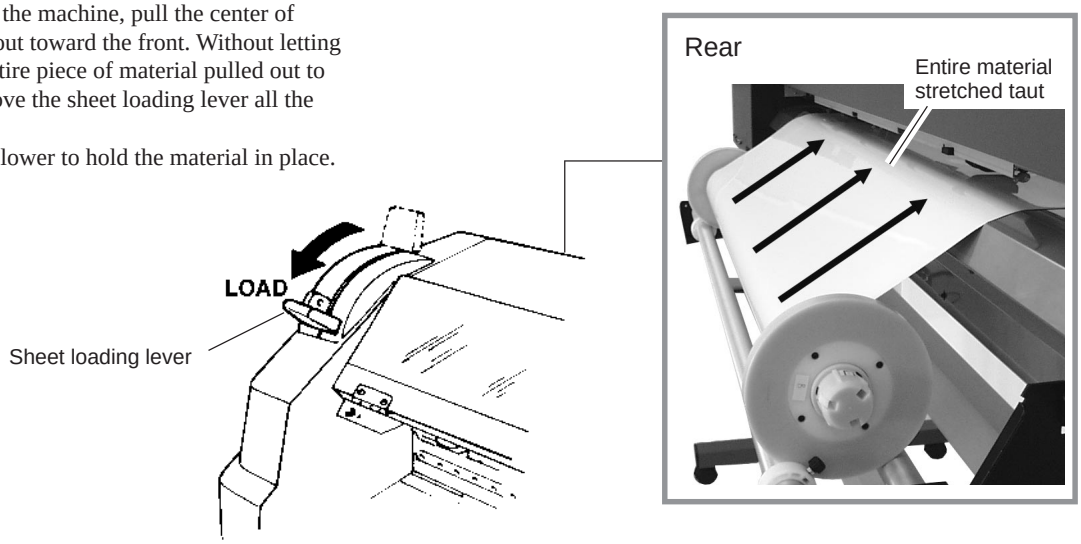
Position the middle pinch roller over the grit roller that lies between the left- and right-hand pinch rollers.



7 Align the left- and right-hand stoppers with the width of the material and tighten the screws to secure in place.



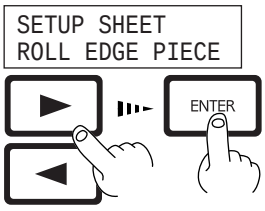
8 From the front of the machine, pull the center of material straight out toward the front. Without letting any part of the entire piece of material pulled out to become slack, move the sheet loading lever all the way to “LOAD.”
The pinch rollers lower to hold the material in place.



* If there is any slack in the loaded material, the material may move at an angle and come loose from the pinch rollers.

9 Close the front cover.
Use the [◄] and [►] keys to select [ROLL], then press the [ENTER] key.

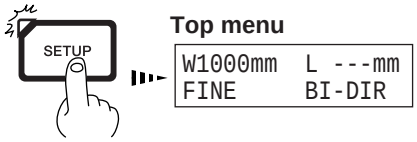
*If printing is to be performed from the edge of the material, select [EDGE] (If [EDGE] does not appear, set [EDGE SENSE] to [ENABLE]).



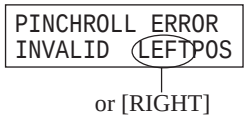
10 Press the [SETUP] key. This detects the width of the material and shows the printable width on the display.

*When [EDGE] is selected in step 9, the width of the loaded material is detected, then the front edge of the material is aligned with the print-start location.

The SETUP LED lights up



If a pinch roller is positioned over an area where there is no grit roller, the message shown below appears when you press the [SETUP] key.



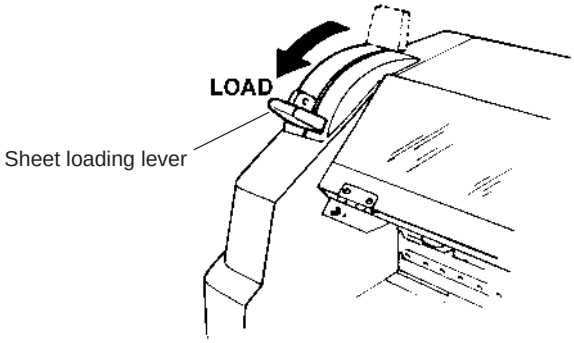
Check the positioning of the pinch rollers and make sure they are aligned at the correct positions.

Loading Flat Material

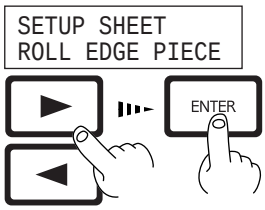
1 Pass the material between the pinch rollers and the grit rollers as shown in the figure.

2 Refer to steps 5 and 6 in "Loading Roll Material," and position the material and the pinch rollers correctly.

3 Move the sheet loading lever toward LOAD.
The pinch rollers lower to hold the material in place.



4 Close the front cover.
Use the [◄] and [►] keys to select [PIECE], then press the [ENTER] key.



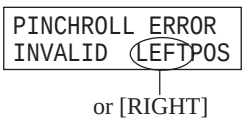
If [PIECE] does not appear, set [EDGE SENSE] to [ENABLE].

5 Press the [SETUP] key. This detects the width and length of the material and shows the printable width and length on the display.

The SETUP LED lights up

*If the material is misaligned and looks like it might come loose from the pinch rollers, or actually does come loose, please reload the material.

If a pinch roller is positioned over an area where there is no grit roller, the message shown below appears when you press the [SETUP] key.



Check the positioning of the pinch rollers and make sure they are aligned at the correct positions.

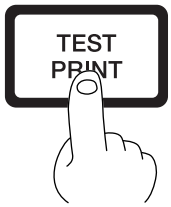
- When loading flat material, if the material touches the shaft or roll material at the back of the machine, remove the shaft and roll material.
- When thick material is loaded, adjust the head height. For more information, see "User's Reference -- Adjusting the Height of the Printing Head."
- When changing to a different type of material, it is necessary to carry out feed correction and bi-directional correction. For more information, see "User's Reference -- Making Corrections for Printing."
- If the sides of the material have warped, then bend back the warp or feed the warped portion to the front and perform setup again. Performing printing with a warped piece of material may cause head smudging or jamming of the material. If the printing heads become damaged or soiled as a result, printing accuracy may suffer.

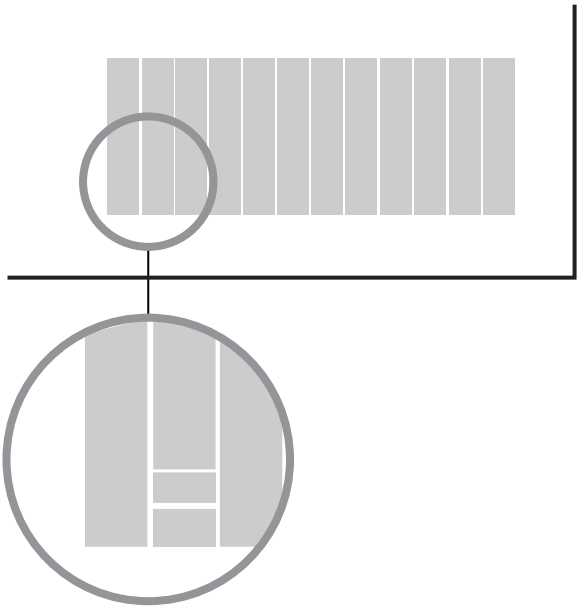
2 Test Printing

Printing quality is greatly affected by the state of the printing heads.
Before starting to print, you can do a test print to check the state of the printing heads.
If problems such as dot drop-out occur, printing quality drops.
If the test results show a problem, carry out head cleaning to restore the head to its normal state, then perform another test print.

1 Load a material, then close the front cover.

2 Hold down the [TEST PRINT] key for 1 second or longer to execute [TEST PRINT].





If there are any missing dots or other evidence of a drop in printing quality, clean the head (see "Maintenance -- Cleaning the Printing Heads").

3 Setting the Printing Mode and Printing Direction

Before starting to print, set the printing mode and printing direction.
On the control panel, press the [PRINT CONFIG] key and specify the printing mode and direction of printing.

- Printing quality and output time vary according to the printing mode. Choose a mode that matches the task. Note that when the printing mode is set on the computer, the computer's setting takes priority.
- The printing time for the same original data becomes increasingly longer in this sequence: DRAFT, FAST, NORMAL, FINE, FINE2, SUPER, and PHOTO. Also, with this procedure, the size of the output file generally grows larger, and the processing time for creating the output file also becomes longer.
  It's also necessary to ensure enough memory on the computer.

Printing Mode

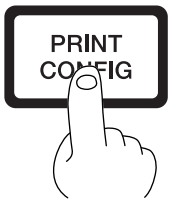
PHOTO:	This is suitable for printing photographs.
SUPER:	This is suitable for output with high image quality, such as posters.
FINE:	This is suitable for output with comparatively high detail, such as posters.
FINE2: (Factory default)	This is suitable for outputting posters and the like on various materials.
NORMAL:	This is suitable for printing large-size items with comparatively high quality in a short time.
FAST:	This is suitable for printing large-size items in a short time.
DRAFT:	This can produce output in the shortest time. It is suitable for checking layout and the like.

Printing Direction

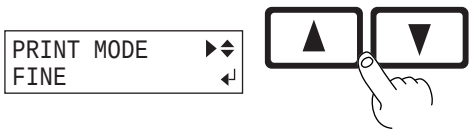
UNI-DIRECTION:
Uni-directional printing.
Printing is performed as the carriage moves from right to left.
Printing quality is better than with [BI-DIRECTION].

BI-DIRECTION (factory default):
Bi-directional printing.
Printing is performed as the carriage moves from right to left, and also as it returns from left to right.
Printing speed is faster than with [UNI-DIRECTION].

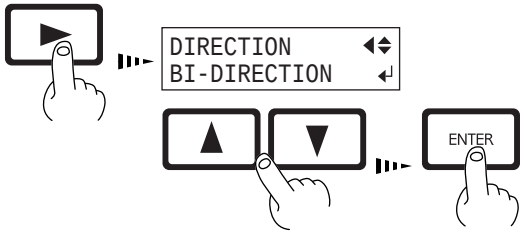
1 Press the [PRINT CONFIG] key.



2 Use the [▲] and [▼] keys to choose the printing mode.



3 Press the [►] key to make the setting for the printing direction.
Use the [▲] and [▼] keys to display the printing direction, then press the [ENTER] key.

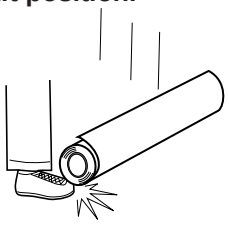


Setup for Cutting

1 Loading the Material

⚠CAUTION

Roll material must be placed at a predetermined shaft position.
Failure to do so may result in dropping the roll, leading to injury.



Acceptable material widths

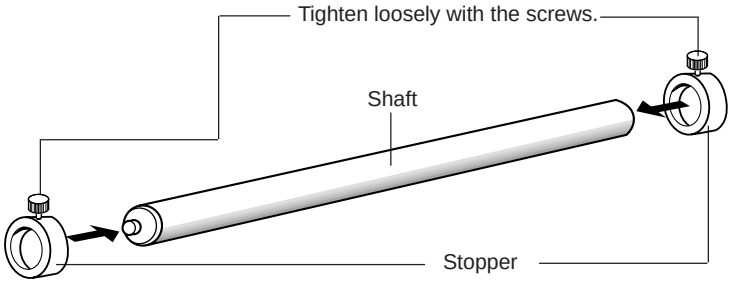
90 mm to 1371 mm (3.5 in. to 54 in.)

*NOTE: when loading material with a width of 90 mm to 430 mm (3.5 in. to 17 in.), set the [EDGE SENSE] menu item to [DISABLE].

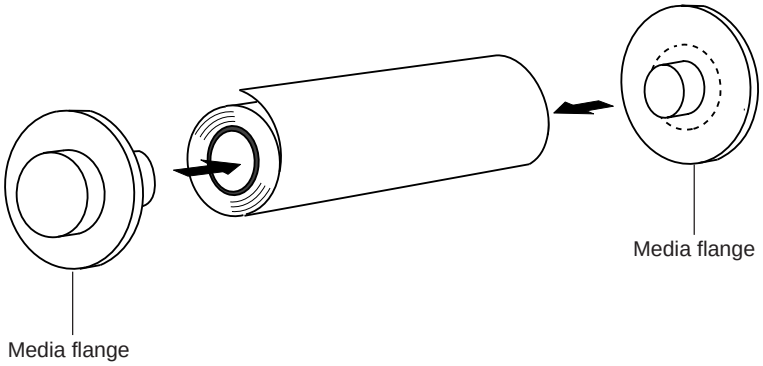
Loading Roll Material

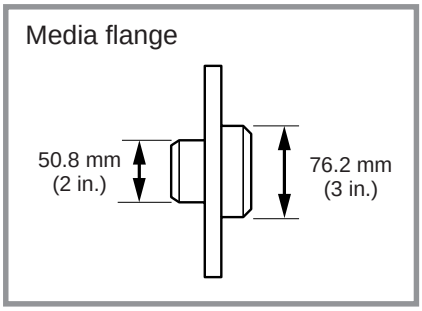
1 Pass the stoppers onto both ends of the shaft.
(The shafts (2 pieces), stoppers (2 pieces), and screws (2 pieces) are included with the stand.)

* When passing the shaft through the stopper, be sure to loosen the screws on the stopper first.

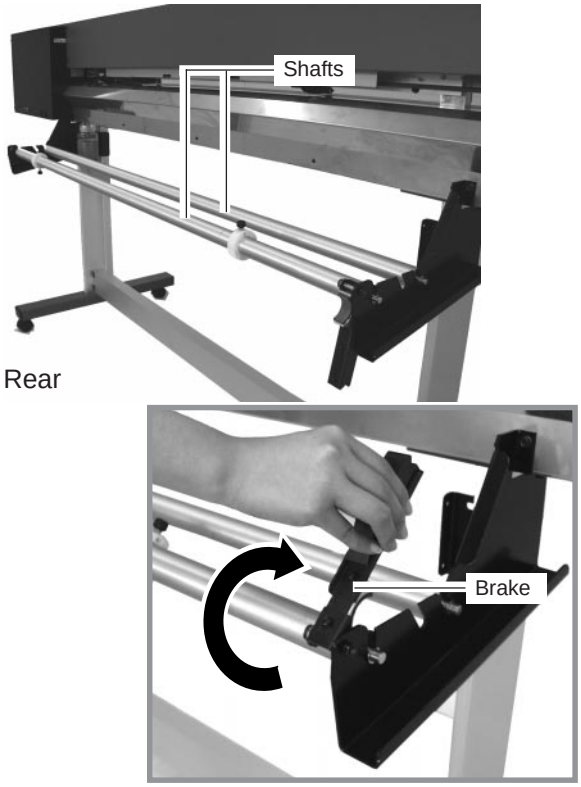


2 Align the media flange with the roll sheet edges, matching the roll sheet center ID.
(The media flange is included with the stand.)





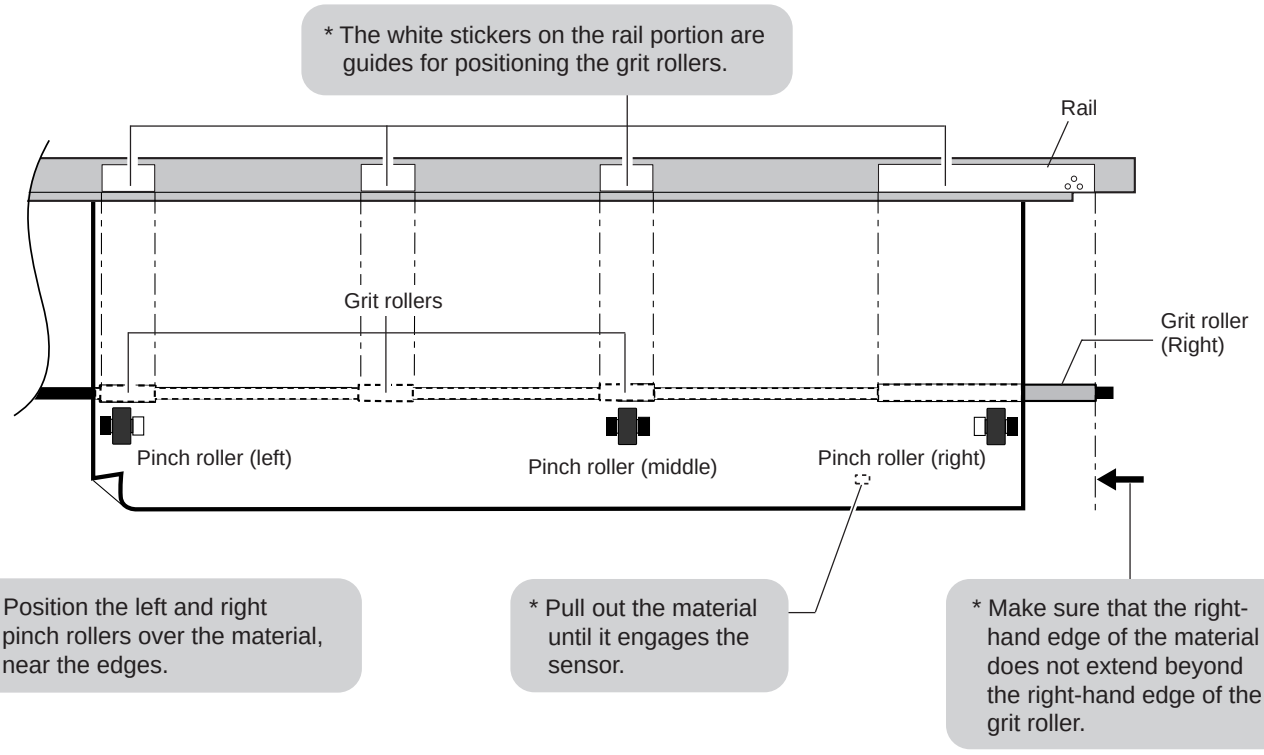
3 Set the two shafts in place and apply the brake.



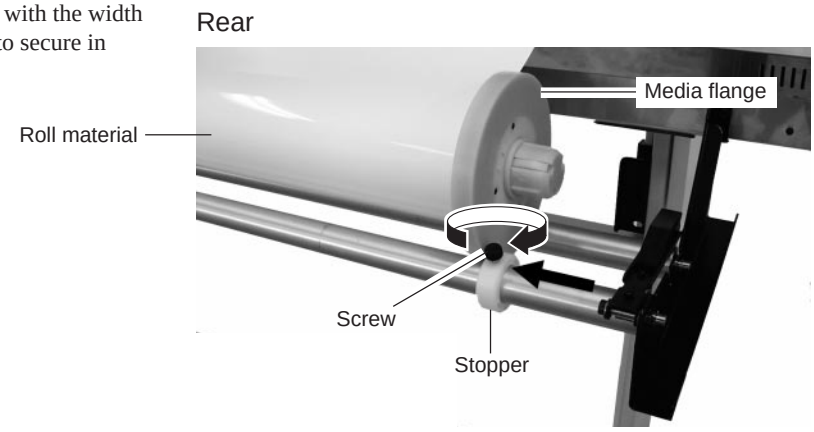
4 Place the rolled material on the shaft.
Pass the end of the material between the pinch rollers and the grit rollers so that it extends from the front of the unit.

5 When viewed from the front, align so that the left-hand edge of the material is above any of the grit rollers and the right-hand edge is above the long grit roller.

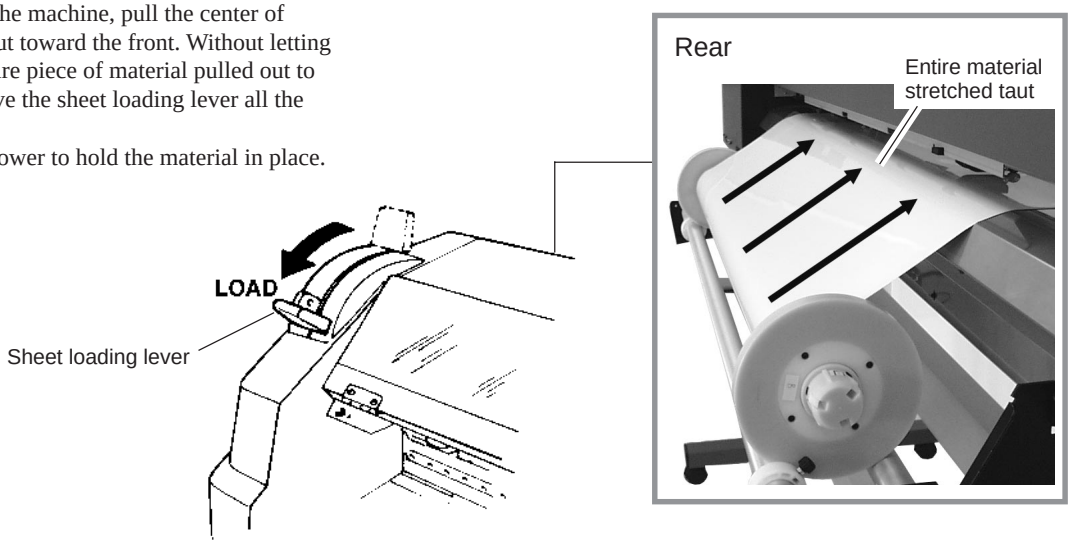
6 Align the orientation of the material so that it is perfectly straight, and move the left-hand and right-hand pinch rollers so that they are above the grit rollers.
Position the middle pinch roller over the grit roller that lies between the left- and right-hand pinch rollers.



7 Align the left- and right-hand stoppers with the width of the material and tighten the screws to secure in place.



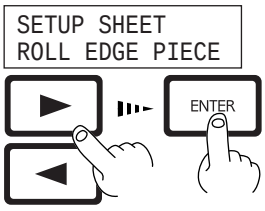
8 From the front of the machine, pull the center of material straight out toward the front. Without letting any part of the entire piece of material pulled out to become slack, move the sheet loading lever all the way to “LOAD.”
The pinch rollers lower to hold the material in place.



* If there is any slack in the loaded material, the material may move at an angle and come loose from the pinch rollers.

9 Close the front cover.
Use the [◄] and [►] keys to select [ROLL], then press the [ENTER] key.

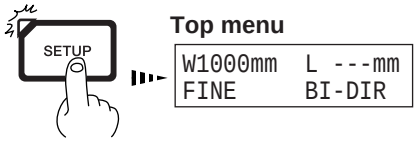
*If cutting is to be performed from the edge of the material, select [EDGE] (If [EDGE] does not appear, set [EDGE SENSE] to [ENABLE]).



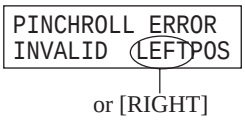
10 Press the [SETUP] key. This detects the width of the material and shows the printable width on the display.

*When [EDGE] is selected in step 9, the width of the loaded material is detected, then the front edge of the material is aligned with the print-start location.

The SETUP LED lights up



If a pinch roller is positioned over an area where there is no grit roller, the message shown below appears when you press the [SETUP] key.



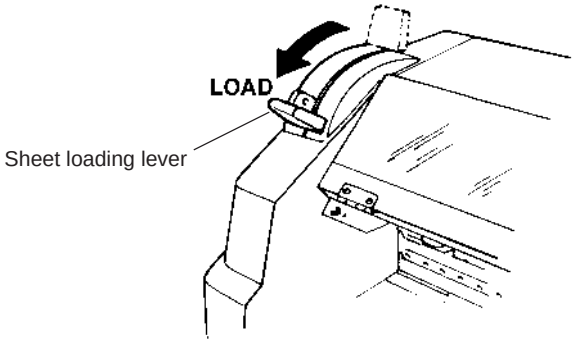
Check the positioning of the pinch rollers and make sure they are aligned at the correct positions.

Loading Flat Material

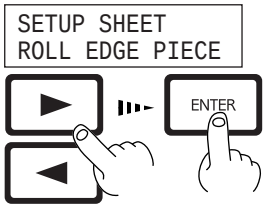
1 Pass the material between the pinch rollers and the grit rollers as shown in the figure.

2 Refer to steps 5 and 6 in "Loading Roll Material," and position the material and the pinch rollers correctly.

3 Move the sheet loading lever toward LOAD.
The pinch rollers lower to hold the material in place.



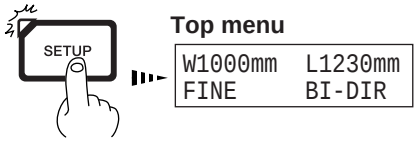
4 Close the front cover.
Use the [◄] and [►] keys to select [PIECE], then press the [ENTER] key.



If [PIECE] does not appear, set [EDGE SENSE] to [ENABLE].

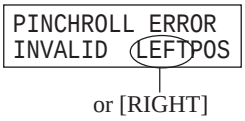
5 Press the [SETUP] key. This detects the width and length of the material and shows the printable width and length on the display.

The SETUP LED lights up



*If the material is misaligned and looks like it might come loose from the pinch rollers, or actually does come loose, please reload the material.

If a pinch roller is positioned over an area where there is no grit roller, the message shown below appears when you press the [SETUP] key.

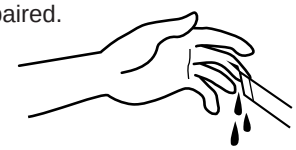


- When loading flat material, if the material touches the shaft or roll material at the back of the machine, remove the shaft and roll material.
- If the sides of the material have warped, then bend back the warp or feed the warped portion to the front and perform setup again.

2 Installing a Blade

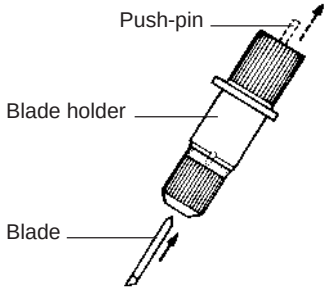
⚠CAUTION

Do not touch the tip of the blade with your fingers.
Doing so may result in injury, and the cutting performance of the blade will be impaired.



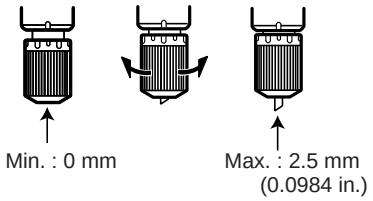
NOTICE Be sure to support the tool mounting screw from below when installing the blade holder. Cutting quality may become poor if installed without supporting the screw in this way.

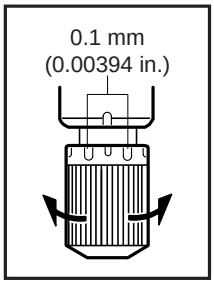
1 Insert a blade into the blade holder until it snaps into place with an audible click.



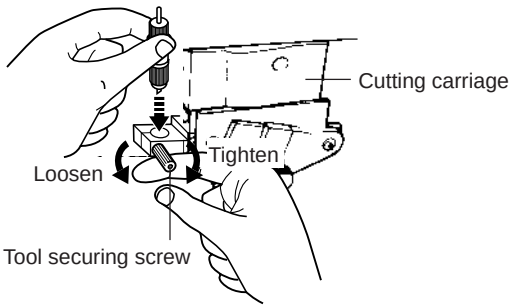
2 Adjust the amount of blade extension as shown in figure to find the optimal amount of blade for the target material.

Turning the tip by an amount corresponding to one large scale gradation extends the blade by 0.1 mm (0.00394 in.).
Adjustment for 0.5 mm (0.0197 in.) can be made by rotating the cap one full turn.





3 (1) Loosen the tool securing screw on the cutting carriage.
(2) Support the tool-securing screw from below and install the blade holder. Insert the blade holder until the collar is flush with the carriage.
(3) Tighten the tool securing screw until the blade holder is secured in place.



When cutting is performed after printing, the cap tip of the blade holder may scratch the printed surface. If this is the case, lengthen the cutter blade extension.

3 Test Cutting

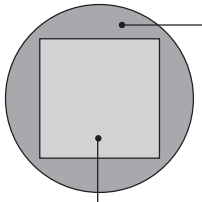
Cutting quality is affected by the blade and material being used, and by the cutting conditions. There are four cutting conditions: “cutting speed,” “blade force,” “blade offset,” and “amount of blade extension.” For high-quality cutting, it is necessary to set the appropriate cutting conditions for the blade and material in actual use.
The test cut is a feature for checking beforehand whether these cutting conditions are appropriate.

1 Install a blade and load a material, then close the front cover.

2 Use the [▲], [▼], [◄] and [►] keys to move the tool carriage to the place where the test cutting is to be performed.

3 Press the [TEST CUT] key for 1 second or longer.
Test cutting starts.

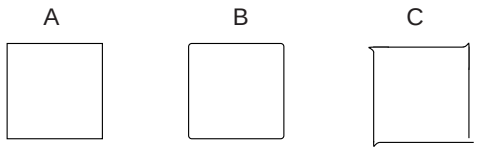
4 Examine the cutting results for the material and diagnose the cutting conditions.



(1) Peel off the round section (marked by ▭).
→When it can be peeled by itself, without disturbing the square (marked by ▭), the cutter force is set appropriately. If both the circle and square peel off, either the “blade force” or the “amount of blade extension” is insufficient.

(2) Remove the square section (marked by ▭).
→The optimum blade pressure is correct if you can clearly make out the lines left by the blade.
If the blade trace is indistinct or too strong, you need to adjust the “blade force” or the “amount of blade extension.”

(3) Check the shape of the rectangle.
- If the corners are cut securely as shown in A, there conditions are correct.
- If the corners are rounded as shown in B, the “blade offset” is insufficient.
- If the corners have “horns” as shown in C, the “blade offset” is too large

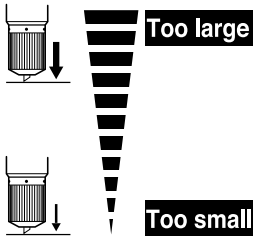


If the test cut shows problems, adjust the cutting conditions.
For “cutting speed,” “blade force,” and “blade offset,” press the [CUT CONFIG] key and set the cutting conditions.
For “amount of blade extension,” refer to “Setup for Cutting -- 2 Installing the Blade.”
Repeat the test cut and adjustment of the cutting conditions until you obtain good cutting results for the material.

Incorrect cutting conditions may cause symptoms such as those described below.

Blade force

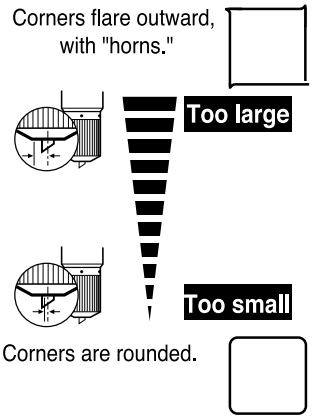
- The material is easily torn.
- The cutter requires frequency replacement.
- Cutting extends through the base paper, and normal advancing of the material becomes impossible.
- The unit suffers damage.



Some parts of the material remain uncut.

Blade offset

Corners flare outward, with "horns."



Corners are rounded.

For Materials with a Strong Adhesive Layer

If you are using a material with a strong adhesive layer, the adhesive layer may adhere to itself immediately when cut. This means that even though the material has actually been cut, it may appear as if it has not been cut, and blade force may mistakenly be set too high.
If a cutting test shows that the material peels easily and the blade traces on the carrier paper are optimal, then the material is being cut. Take care not to set the blade force excessively high.

Setup for Printing and Cutting

Before performing printing and cutting, set up the machine as follows.

1 Loading the Material

Refer to “Setup for Printing -- 1 Loading the Material” and load the material correctly.

2 Installing a Blade

Refer to “Setup for Cutting -- 2 Installing the Blade” and install the blade correctly.

3 Test Printing

Refer to “Setup for Printing -- 2 Printing Test” and check the state of the heads.

4 Setting the Printing Mode and Printing Direction

Refer to “Setup for Printing -- 3 Selecting the Printing Mode and Direction of Printing” and make the settings for the modes.

5 Test Cutting

Refer to “Setup for Cutting -- 3 Cutting Test” and perform a cutting test and adjust the cutting conditions.

Downloading Printing/Cutting Data

NOTICE

Opening the front cover while printing is in progress causes an emergency stop. This means that printing may not be carried out correctly even if operation is resumed, due to drop-out or misalignment of the image.
To pause printing for any other reason than an emergency stop, press the [PAUSE] key.
Note pressing the [PAUSE] key to pause operation may result in differing image quality before and after the pause. It is a good idea to avoid pausing operation while printing is in progress whenever possible.

If you leave the print head uncapped for a long time (for example, open the front cover while print head is in the middle of platen), print heads may get clogged and, in some cases it results in unrecoverable damage to the print head.

Printing or cutting is started when data is sent from the computer.

If the top menu isn't displayed, printing or cutting doesn't start even when data is sent from the computer.

Conditions for starting printing or cutting
The material must be already set up (with the SETUP LED lighted), and the display must show the top menu.

Top menu

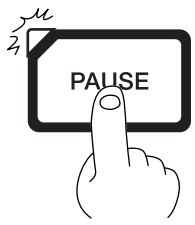
```
W1234mm  L ---mm
FINE     BI-DIR
```

If another menu screen is displayed, press the [SETUP] key to go back to the top menu.
(Pressing the [SETUP] key when another menu screen is displayed does not cancel the set-up for the material.)

Pausing Printing or Cutting Operations

Press the [PAUSE] key.

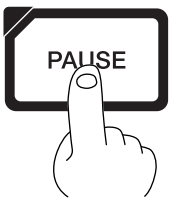
The PAUSE LED lights up



To resume printing

Press the [PAUSE] key.

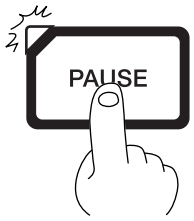
The PAUSE LED goes out



Stopping Printing or Cutting Operations

1 Press the [PAUSE] key.

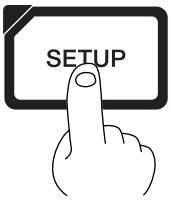
The PAUSE LED lights up



2 Halt transmission of print or cutting instructions from the computer.

3 Hold down the [SETUP] key for one second or longer. Any remaining data is cleared.

The SETUP LED goes out



* Clearing the data may take some time.

If the "INK EMPTY" message appears while printing

If it becomes necessary to replace the ink cartridge while printing is in progress, the buzzer sounds and the following message is displayed. Please replace the ink cartridge.
If this message is ignored and printing is continued without replacing the ink cartridge, image quality may be adversely affected and exhibit faintness or other problems.

```
INK EMPTY
        [KCMcmY]
```

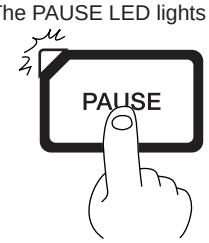
This indicates the ink color.
The color for which ink has run out flashes.

K = Black / C = Cyan / M = Magenta /
c = Light Cyan (O = Orange) /
m = Light Magenta (G = Green) / Y = Yellow

1 When [INK CONTROL]'s [EMPTY MODE] is set to [LATER]

Press the [PAUSE] key to pause printing.

The PAUSE LED lights up



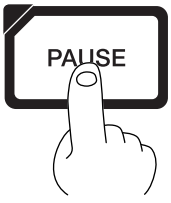
When [INK CONTROL]'s [EMPTY MODE] is set to [PROMPT]

The unit pauses automatically.

2 Pull out the cartridge for the ink color that has run out, and replace with a new cartridge (see "Replacing the Ink Cartridges").

3 Press the [PAUSE] key to resume printing.

The PAUSE LED goes out



About the [EMPTY MODE]

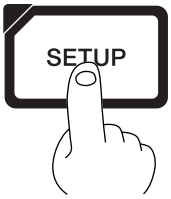
When replacement of the ink cartridge becomes necessary while printing is in progress, this setting determines whether printing continues or pauses.
This setting is used when the ink cartridge cannot be changed immediately during printing, such as during unattended operation at night. [LATER] causes printing to continue without pause even if ink cartridge replacement becomes necessary. Printing continues with the small amount of ink remaining, so the printed image may become faint as the ink runs out. In general, it should possible to perform about 1 m^2 (10 ft^2) of printing once this message appears, although the actual amount varies widely according to the amount of ink needed for the particular image. Printing is continued only for the data currently being printed. Operation stops after one image is output.
[PROMPT] causes operation to pause immediately when the ink cartridge needs to be changed. Printing is resumed by replacing the cartridge and pressing the [PAUSE] key. Please note, however, that the colors of an image in progress may no longer be perfectly matched if the unit is allowed to remain paused for two or three hours before resuming printing.

Removing the Material

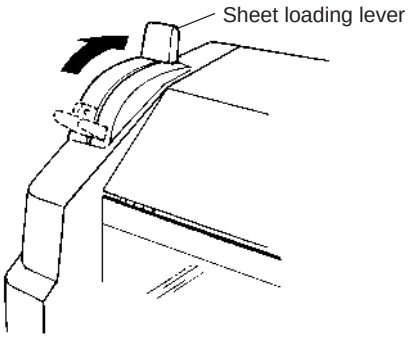
Removing the Material from the machine

1 Press the [SETUP] key. Hold down for about 1 second.

The SETUP LED goes out



2 Move the sheet loading lever toward the back of the unit.
The pinch rollers rise to release the material.



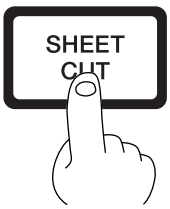
3 Open the front cover.
To remove the material.

Cut the material from the roll

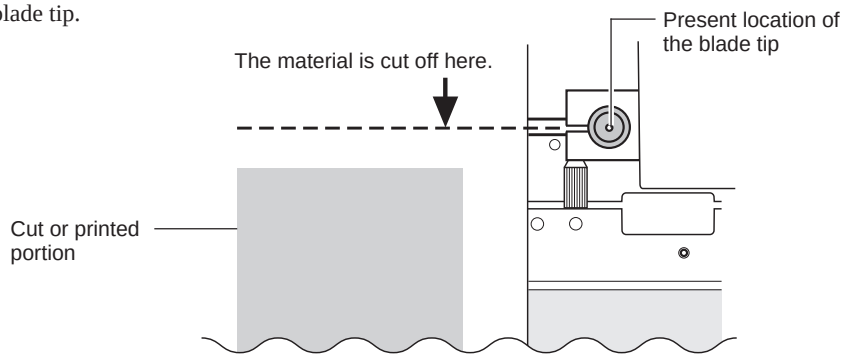
Either of two methods can be used to separate a portion that's already been cut or printed from the roll. One method is to press the [SHEET CUT] key. The other method is to perform separation automatically by sending a material-cutting command from the computer.

When separating the material by pressing the [SHEET CUT] key

Holding down the [SHEET CUT] key for 1 second or longer severs the material at the present location of the blade tip.



* This operation isn't necessary when sending a material-cutting command from the computer to separate the material automatically.

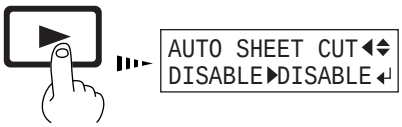


When sending a material-cutting command from the computer to separate the material automatically

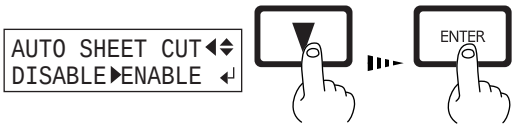
* When the material-cutting command has not been set to "enabled" at the computer, automatic separation of the material is not performed, even when the following setting is made.

1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

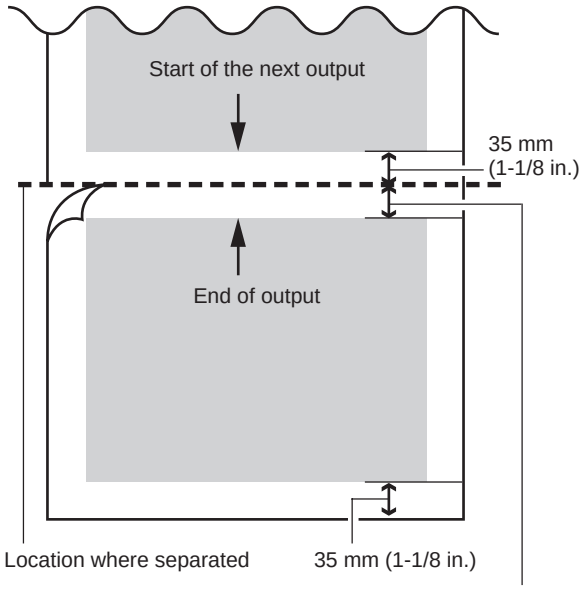
2 Press the [►] key to make the following screen appear on the display.



3 Use the [▼] key to select [ENABLE], then press the [ENTER] key.



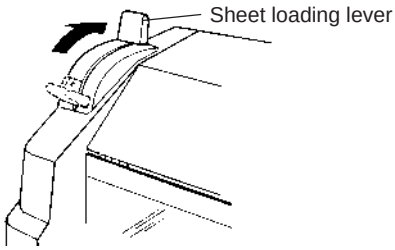
The material-separating location during continuous output



When Operations Are Finished

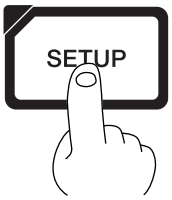
NOTICE

When operations are finished, move the sheet loading lever toward the back of the machine to raise the pinch rollers. The pinch rollers may be deformed if allowed to remain in the lowered state.

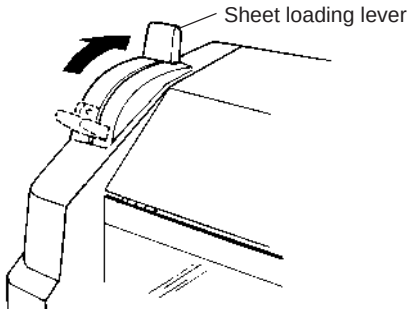


1 If the SETUP LED is lighted, press the [SETUP] key. Hold down for about 1 second.

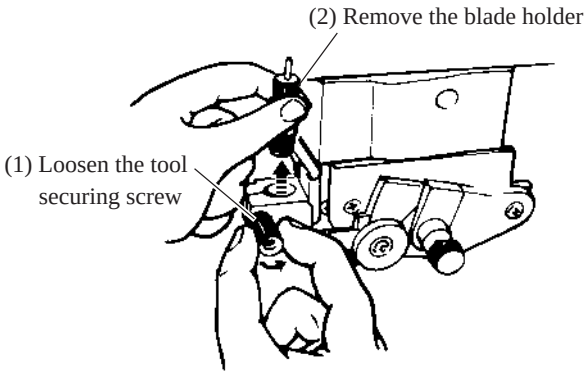
The SETUP LED goes out



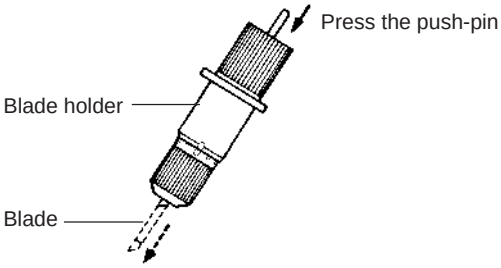
2 Move the sheet loading lever toward the back of the unit and remove the material.



3 Remove the blade holder from the cutting carriage.

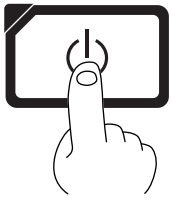


4 Remove the blade.



5 Press the [POWER] key to switch off the power.
The carriage moves to the standby position and the head is capped.
If the carriage is already at the standby position, no movement takes place.

The POWER LED goes out

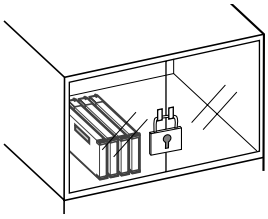


Maintenance

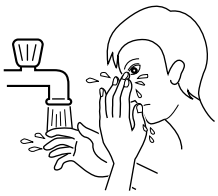
Replacing the Ink Cartridges

⚠CAUTION

Store ink cartridges out of the reach of children.



If ink contacts the eyes, flush immediately with water.



NOTICE

Do not remove any ink cartridges except when shipping the CJ-500.

Use only the type of filled ink specified for the machine.
If ink runs out, replace immediately with an ink cartridge designed especially for the CJ-500. Do not attempt to refill and reuse an empty ink cartridge.
If an ink cartridge is removed, replace it immediately with a new one.

Do not attempt to disassemble an ink cartridge.

Unused ink cartridges should be stored unopened at a temperature of -20°C (-4°F) to 40°C (104°F).

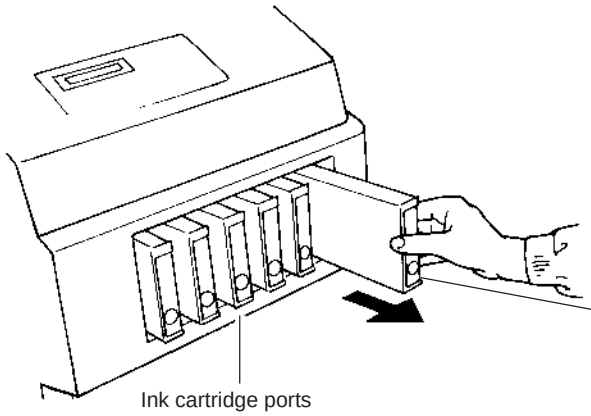
If an ink cartridge is dropped, the shock due to the fall may damage the ink cartridge and make it unusable.

When removing an ink cartridge, do not rush. Detach the cartridge gently. Sudden movement when detaching may cause ink to be spilled.

- If any ink gets on your hands or clothing, wash it off as soon as possible. Ink stains will become difficult to remove if allowed to dry
- Once an ink cartridge has been installed, do not remove it until the ink has been used up. Frequent insertion and removal may allow air to enter the ink tube and result in a drop in printing quality.

1 Remove the ink cartridge from the ink-cartridge port.

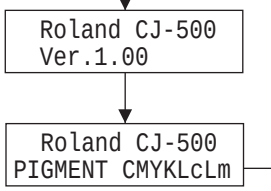
2 Insert new ink cartridge.



PIGMENT = pigment ink **DYE** = dye ink

Use only the type of ink currently filled in the machine.
The present ink type is displayed when the power is turned on.

Press the key



UNKNOWN TYPE = No ink is filled.
PIGMENT CMYKLcLm
= Pigment ink (cyan, magenta, yellow, black, light cyan, and light magenta)
PIGMENT CMYKOrGr
= Pigment ink (cyan, magenta, yellow, black, orange, and green)
DYE CMYKLcLm
= Dye ink (cyan, magenta, yellow, black, light cyan, and light magenta)

With pigment inks, do not insert ink cartridges for orange or green when using light cyan and light magenta. Also, do not insert the ink cartridges for light cyan or light magenta when using orange and green.
If ink cartridges other than the filled type or color are installed, printed color will be inaccurate.

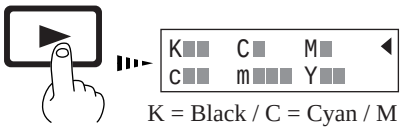
To change the type of ink, you must use an optionally available cleaning cartridge to flush the ink. For more information, see "Maintenance -- Changing the Type of Ink."

Check how much ink remains

You can use [INK LEFT] on the display menu to check how much ink is left after the ink cartridges have been installed.
Use this information as a guide for replacing the ink cartridges.
If a partially used ink cartridge is removed and reinstalled, or if a partially used ink cartridge is installed, the cartridge is "read" as unused, and the amount of remaining ink is not accurate.

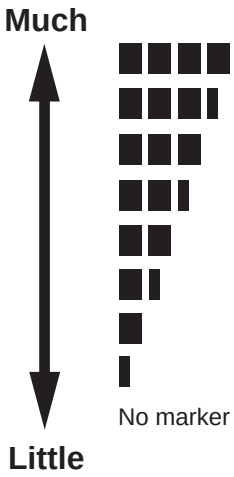
1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

2 Press the [►] key to make the following screen appear on the display.
The fewer the markers, the less is the amount of ink left.



K = Black / C = Cyan / M = Magenta /
c = Light Cyan (O = Orange) /
m = Light Magenta (G = Green) /
Y = Yellow

Remaining ink



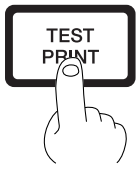
Cleaning the Printing Heads

Switching on the sub power automatically performs maintenance operations, including cleaning of the printing head. This means that there is normally no need to perform cleaning otherwise.
If drop-out occurs with printed images, clean the printing head.
* After cleaning, carry out a printing test. Load material.

The cleaning causes a certain amount of head wear and also consumes a certain amount of ink, so use should be kept to a minimum.
[POWERFUL] results in faster head wear and also uses up more ink. (Performing cleaning from the [POWERFUL] menu uses up about 57 cc of ink (total) for six colors. This is because the process discharges all ink in the ink tube and replaces it with fresh ink.)

1 Hold down the [CLEANING] key for 1 second or longer to start head cleaning.

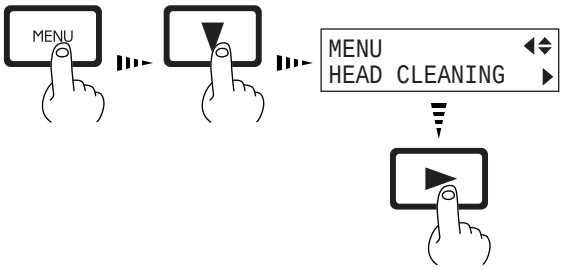
2 When head cleaning finishes, hold down the [TEST PRINT] key for 1 second or longer to perform a printing test (see "Setup for Printing -- Test Printing").



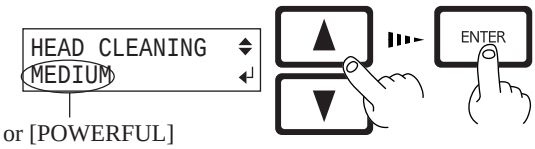
3 Check the printing-test results.
If a problem is found, repeat the cleaning.

If drop-out persists even after carrying out cleaning several times

1 Press the [MENU] key and [▼] key to display [HEAD CLEANING], then press the [►] key.



2 Use the [▲] and [▼] keys to select either [MEDIUM] or [POWERFUL], then press the [ENTER] key.
Head cleaning starts.

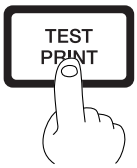


or [POWERFUL]

*The cleaning function increases in this sequence.

- When the [CLEANING] key is pressed
- The [MEDIUM] menu item on the [HEAD CLEANING] menu
- The [POWERFUL] menu item

3 When head cleaning finishes, hold down the [TEST PRINT] key for 1 second or longer to perform a printing test (see "Setup for Printing -- Test Printing").



4 Check the printing-test results.
If a problem is found, repeat the cleaning.

If image drop-out is not corrected even when cleaning has been performed several times from the [POWERFUL] menu

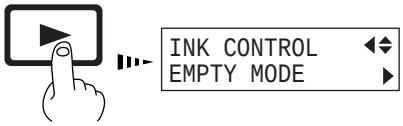
If image drop-out is not corrected even when cleaning has been performed several times from the [POWERFUL] menu, use the included cleaning kit. For information on how to use the cleaning kit, refer to the documentation included with the kit.
If cleaning with the cleaning kit does not correct image drop-out, consult your authorized Roland DG Corp. dealer or service center.

Changing the Type of Ink

To change the type of ink in use, change the ink set on the LED.
Ink replacement requires three optionally available cleaning cartridges.

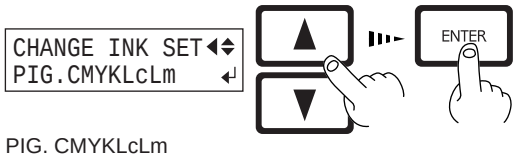
1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

2 Press the [►] key to make the following screen appear on the display.



3 Use the [▼] key to select [CHANGE INK SET], then press the [►] key.

4 Use the [▲] and [▼] keys to select the new type of ink to use, then press the [ENTER] key.



PIG. CMYKLcLm
(Pigment ink : cyan, magenta, yellow, black, light cyan, and light magenta)
PIG. CMYKOrGr
(Pigment ink : cyan, magenta, yellow, black, orange, and green)
DYE CMYKLcLm
(Dye ink : cyan, magenta, yellow, black, light cyan, and light magenta)

5 When the display shown in the figure appears, discard the discharged ink in the drain bottle.
* Be sure to discard the discharged ink.
Attempting to replace the ink while discharged ink remains may cause discharged ink to overflow from the bottle.

```
DISCARD
     DRAIN INK ↵
```

6 Remount the drain bottle and press the [ENTER] key to display the screen shown in the figure.

```
REMOVE CARTRIDGE
        [KCMcmY]
```

7 When all ink cartridges have been removed, ink replacement starts. Follow the messages on the display to carry out the procedure.

Messages appearing during ink replacement

```
SET CL-LIQUID
        [KCMcmY]
```

Insert a cleaning cartridge into the ink cartridge port for the flashing color.

```
REMOVE CL-LIQUID
        [KCMcmY]
```

Remove the cleaning cartridge from the ink cartridge port for the flashing color.

K = Black C = Cyan M = Magenta c = Light Cyan (O = Orange)
m = Light Magenta (G = Green) Y = Yellow

8 When the display shown in the figure appears, insert the ink cartridge to be newly used.

```
SET CARTRIDGE
        [KCMOGY]
```

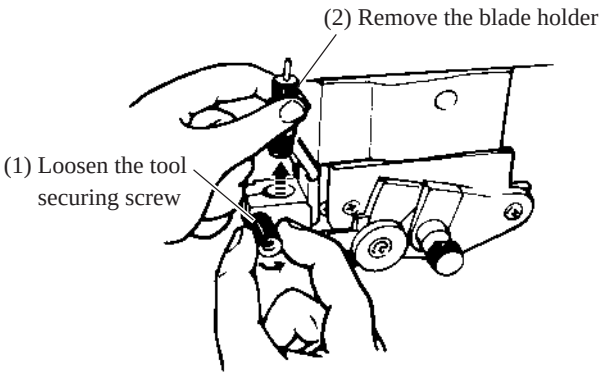
9 When the display shown in the figure appears, ink replacement is finished.
Press the [SETUP] key to go back to the top menu.

Replacing the Cutter Blade

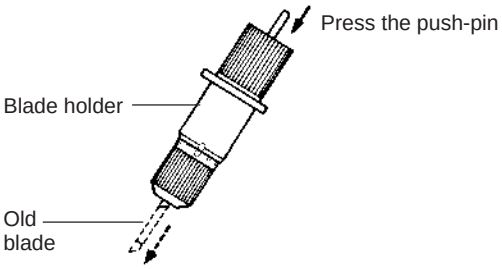
⚠CAUTION

Do not touch the tip of the blade with your fingers.
Doing so may result in injury, and the cutting performance of the blade will be impaired.

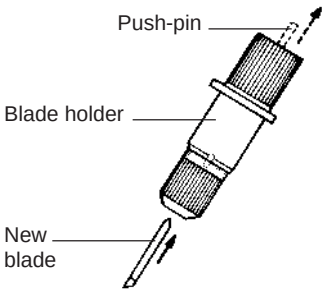
1 Remove the blade holder from the cutting carriage.



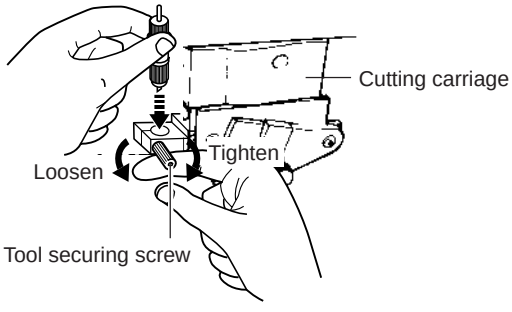
2 Remove the old blade.



3 Replace with a new blade.



4 (1) Loosen the tool securing screw on the cutting carriage.
(2) Support the tool-securing screw from below and install the blade holder. Insert the blade holder until the collar is flush with the carriage.
(3) Tighten the tool securing screw until the blade holder is secured in place.



How to Replace the Separating Knife

⚠CAUTION

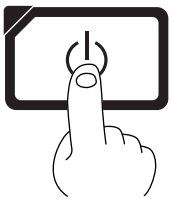
Do not touch the tip of the blade with your fingers.
Doing so may result in injury, and the cutting performance of the blade will be impaired.

Make sure the power to the unit is off before attempting to replace the separating knife.
Doing so may result in injury.

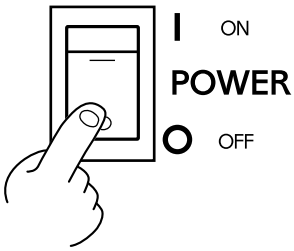
Replace the separating knife with the replacement blade included with the CJ-500.

1 Press the [POWER] key to switch off the power.

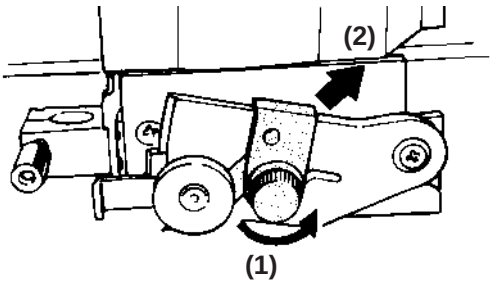
The POWER LED goes out



2 Turn off the main power switch.

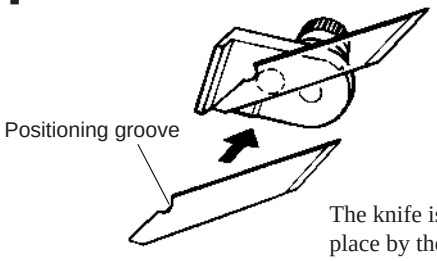


3 Remove the separating knife.
(1) Loosen the screw until it slips out.
(2) Grasp the screw portion, and slowly pull it out in the direction of the arrow.
* Do not pull back while doing this.



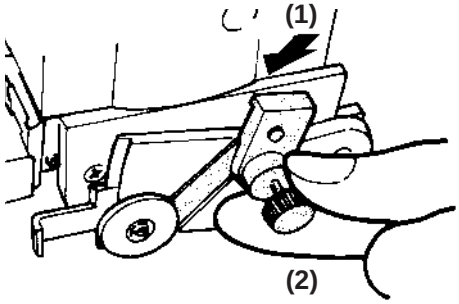
If the blade remains in the carriage, use commercially available tweezers to remove it.

4 Replace with a new knife.



The knife is secured in place by the magnet.

5 Install the separating knife.
(1) Grasp the screw portion and slowly insert it into the groove.
* Take care to ensure that the knife does not slip
(2) Tighten the screw.



When the Product Needs Cleaning

NOTICE

When performing cleaning, turn off the main power switch.
* Before turning off the main power, press the [POWER] key to switch off the sub power.

Never lubricate the mechanisms.

Use a small amount of water or ethyl alcohol for cleaning the covers. Never use solvents such as benzene or thinner.

Periodically clean the platen. Attractive printing may become impossible if the platen is soiled.

Do not touch the printing heads or allow the printing heads to come in contact with anything except ink.

Cleaning the body

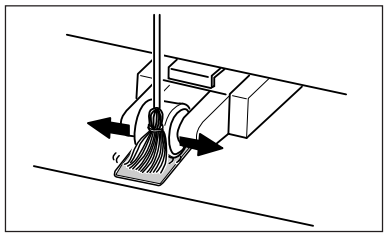
Use water or ethyl alcohol to clean, and wipe gently with a clean cloth. Wipe the operation panel and display gently with a clean, dry, and soft cloth.

Cleaning the platen

If the platen is dirty clean with ethyl alcohol or water and wipe gently with a cloth.

Cleaning the grit rollers

Use a commercially available brush to remove dust and other detritus. Brush horizontally while rotating the grit rollers.
Any adhering grime may prevent the material from being held in place securely.



Cleaning the pinch rollers

Use water or ethyl alcohol and clean with a soft cloth.

Cleaning the front cover

Use water or ethyl alcohol and clean with a soft cloth.

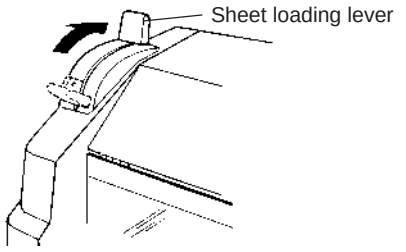
Cleaning the blade holder cap

If material debris is adhering to the inner surface of the cap for the blade holder, loosen and remove the cap, then remove the material debris.

When Not in Use for a Prolonged Period...

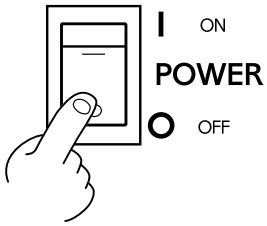
NOTICE

When not in use, move the sheet loading lever toward the back of the unit to leave the pinch rollers in the up position state. The pinch rollers may be deformed if allowed to remain in the lowered state.



Do not switch off the main power with the printing head in an uncapped state (i.e., while the carriage is on the platen).
If you leave the carriage uncapped for a long time, doing so may result in clogging of the printing head, making it unusable.
Before switching off the main power, be sure to press the [POWER] key to switch off the sub power for the CJ-500.

1 After carrying out steps 1 to 5 in "When Operations are Finished" (p. 41) turn off the main power switch.



2 Unplug the power cord from the electrical outlet.

* If the unit will be out of use for a month or longer, follow steps 1 through 9 of "When Moving the Unit..." to wash the printing heads. Head washing requires three optionally available cleaning cartridges.

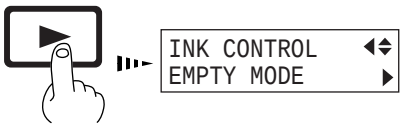
When Moving the Unit...

NOTICE When moving the unit, first carry out head washing, then secure the carriage in place. Head washing requires three optionally available cleaning cartridges.

1 If there is material loaded, hold down the [SETUP] key for 1 second or longer to cancel setup, then remove the material (see "Remove the Material").

2 Press the [MENU] key and [▼] key to make the following screen appear on the display.

3 Press the [►] key to make the following screen appear on the display.



4 Use the [▼] key to select [HEAD WASH], then press the [ENTER] key.

5 When the display shown in the figure appears, discard the discharged ink in the drain bottle.
* Be sure to discard the discharged ink.
Attempting to head washing while discharged ink remains may cause discharged ink to overflow from the bottle.

```
DISCARD
     DRAIN INK ↵
```

6 Mount the drain bottle and press the [ENTER] key to display the screen shown in the figure.

```
REMOVE CARTRIDGE
        [KCMcmY]
```

7 When all ink cartridges have been removed, head washing starts. Follow the messages on the display to carry out the procedure.

Messages appearing during head washing

```
SET CL-LIQUID
       [KCMcmY]
```

Insert a cleaning cartridge into the ink cartridge port for the flashing color.

```
REMOVE CL-LIQUID
       [KCMcmY]
```

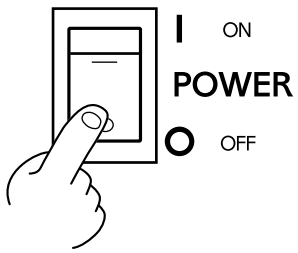
Remove the cleaning cartridge from the ink cartridge port for the flashing color.

K = Black C = Cyan M = Magenta c = Light Cyan (O = Orange)
m = Light Magenta (G = Green) Y = Yellow

8 When the display shown in the figure appears, head washing is finished.
Press the [POWER] key to switch off the sub power.

The POWER LED goes out

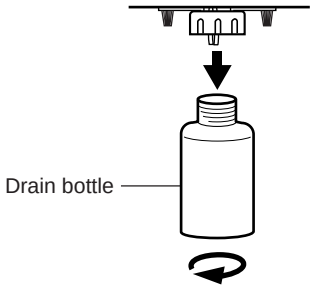
9 When the POWER LED goes out, turn off the main power switch.



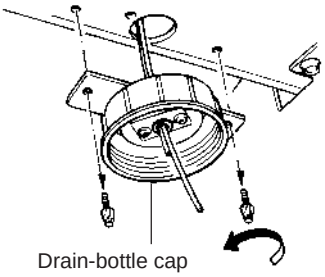
Continued on the next page

10 Detach the power cord and the cable connecting the unit to the computer.

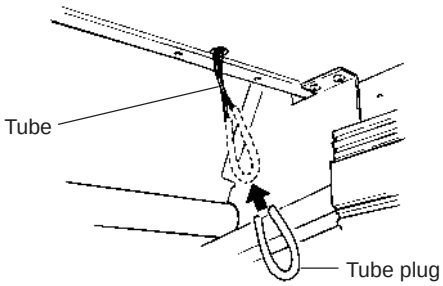
11 Remove the drain bottle.



12 Remove the drain-bottle cap.



13 Attach the tube plug to the tube tips instead.



14 Referring to "Unpacking and Repacking" on the packing carton, secure the carriage in place and pack the unit in the carton.

User's Reference

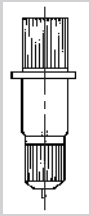
Setting the Start Point

Set the print or cutting start position (base point) to the desired location.

1 Load material and install a blade, then press the [SETUP] key.

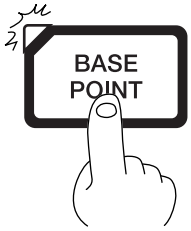
2 Use the arrow keys to align the blade with the new printing or cutting start location (base point).

Align with the center of the blade installed on the cutting carriage.



3 Press the [BASE POINT] key.

The BASE POINT LED lights up



When an align point has been set, it is released if the [BASE POINT] key is pressed.

To change the starting location that has been set...

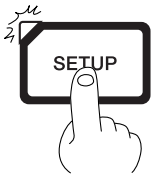
- Set a new starting location in a different location.
- Press the [SETUP] key to cancel the setup for the material (making the SETUP LED go out).

Adjusting the Printing and Cutting Positions

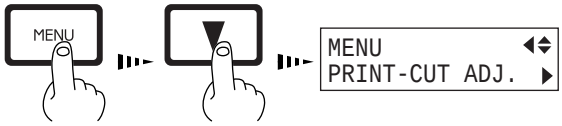
When printing is followed by cutting, the cutting line may be displaced from the printing.
If this happens, use the display menu's [PRINT-CUT ADJ.] function to align the printing and cutting positions.

Adjusting Automatically

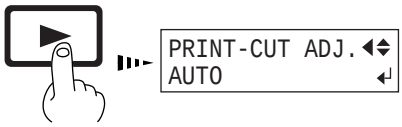
1 Load some material and press the [SETUP] key.



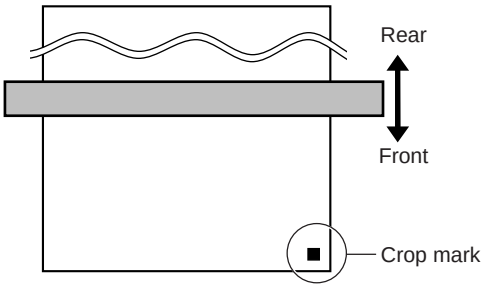
2 Press the [MENU] key and [▼] key to make the following screen appear on the display.



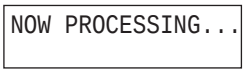
3 Press the [►] key to make the following screen appear on the display.



4 Press the [ENTER] key to print crop marks and read the crop marks automatically.



While automatic adjustment is in progress, the following message appears on the display.

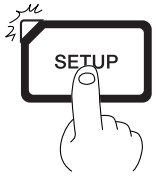


5 When the following message appears, automatic adjustment is finished.

Depending on the type of material, the crop mark may not be read accurately.

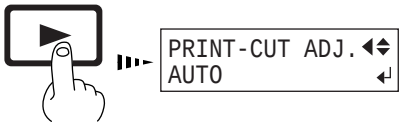
Adjusting Manually

1 Load material and install a blade, then press the [SETUP] key.

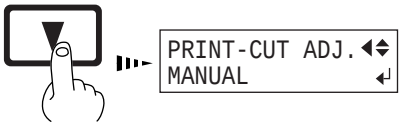


2 Press the [MENU] key and [▼] key to make the following screen appear on the display.

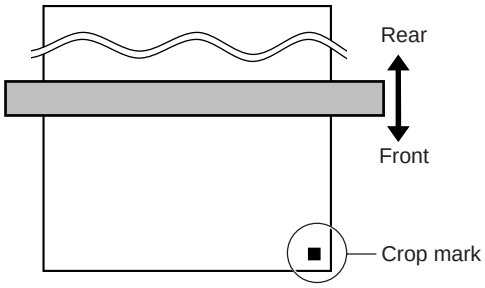
3 Press the [►] key to make the following screen appear on the display.



4 Press the [▼] key to make the following screen appear on the display.

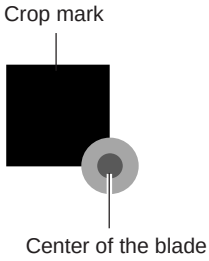


5 Press the [ENTER] key to print crop marks.

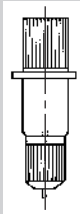


After printing the crop mark, the following message appears.

6 Use the arrow keys to align the center of the blade at the lower-right corner of the crop mark.



Align with the center of the blade installed on the cutting carriage.



7 Press the [ENTER] key to adjust the printing and cutting positions.

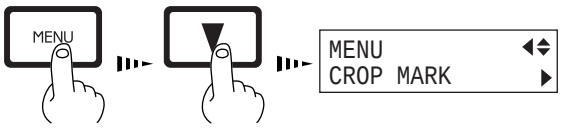
Remove the Printed Material, then Reload the Material and Perform Cutting -Setting the Base Point and the Align Point-

This feature is for performing position alignment in cases where printing is performed, after which the material removed from the machine for further processing (such as laminating), then again loaded on the machine for cutting.

When cutting off a piece of material that has been printed from a roll, then again loading it as [PIECE], make sure there is 80 mm (3-3/16 in.) or more from where printing ended to the material's end edge (the place where cut off from the roll).
When cutting off the material automatically, set a page margin of 80 mm (3-3/16 in.) or more (see "Setting the Page Margins").

Adjusting Automatically

1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

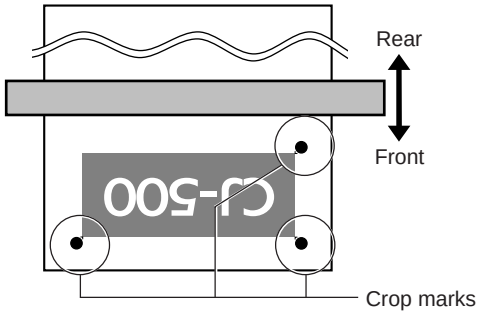


2 Press the [►] key to make the following screen appear on the display.

3 Use the [▼] key to select [ENABLE], then press the [ENTER] key.

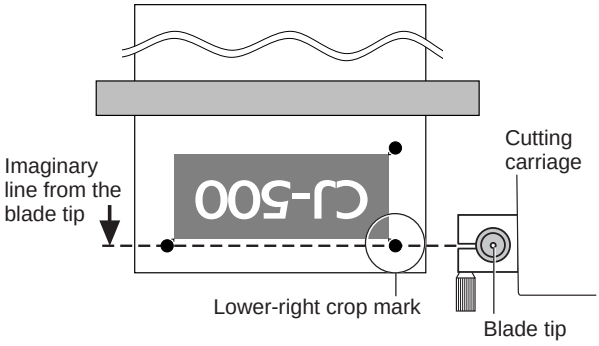
* Setting [CROP MARK] to [ENABLE] makes the output area 25 mm (1 in.) narrower.

4 Send the printing data from the computer.
Three crop marks are automatically printed on the left and right areas at the front edge of the material.

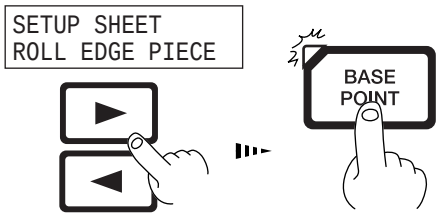


5 When printing is finished press the [SET UP] key, remove the material and carry out lamination (or whatever further processing needs to be done).
After processing, load the material at the same pinch-roller positions used during printing.

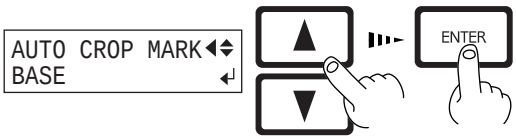
6 Use the [▲] and [▼] keys to position the material so that the lower-right crop mark lies on an imaginary line extending from the blade tip.



7 Use the [►] and [◄] keys to select the type of material that is loaded, then press the [BASE POINT] key.



8 When the screen shown in the figure appears, use the [▲] and [▼] keys to choose [BASE] or [BASE-ALIGN], then press the [ENTER] key.



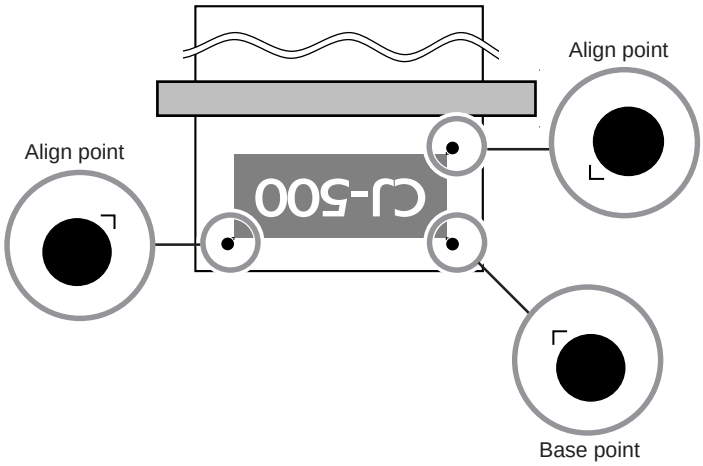
BASE :Only the base point is detected.
BASE-ALIGN :The base point and the align points are detected.

9 Press the [SET UP] key.
The crop marks printed in step 4 are detected automatically, and the base point and the align points (if you selected [BASE-ALIGN]) are set and adjusted.

*The align point cannot be set if the angle between the base point and the align point is 5 degrees or more.

*Crop marks drawn with computer programs cannot be used as crop marks by this machine.

*Depending on the kind of lamination that's performed, the crop marks may not be read accurately.



10 Send the cutting data from the computer.

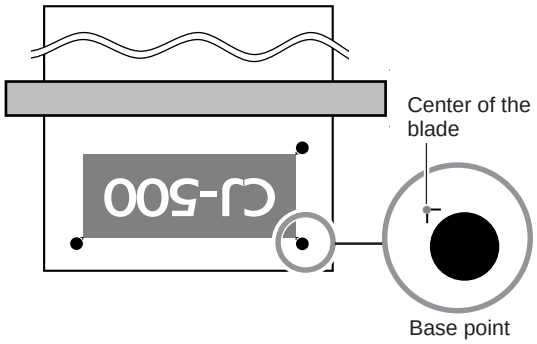
Adjusting Manually

1 Follow steps 1 through 4 for making the setting automatically on the previous pages, then perform printing.

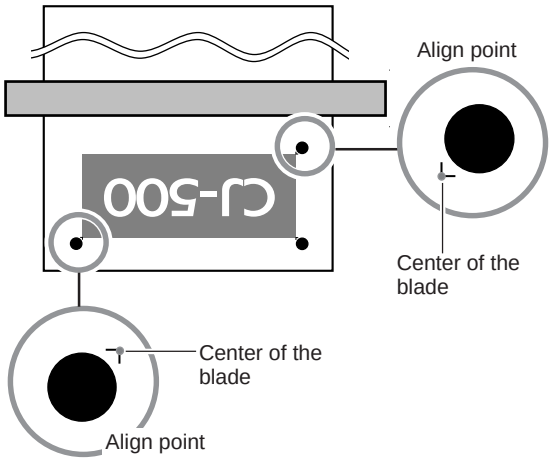
2 When printing is finished press the [SET UP] key, remove the material and carry out lamination (or whatever further processing needs to be done). Load the material at the same pinch-roller positions used during printing, then press the [SETUP] key.

3 Install a blade on the cutting carriage.

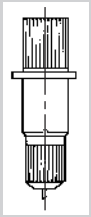
4 Set the base point.
Use the arrow keys to align the blade at the place on the lower-right crop mark shown in the figure, then press the [BASE POINT] key.



5 Set the align point.
Use the arrow keys to align the blade at the place on the lower-left or upper-right crop mark shown in the figure, then press the [ALIGN POINT] key.



Align the center of the blade with the base point or the align point.



*The align point cannot be set to both the lower left and upper right points.

*The align point cannot be set if the angle between the base point and the align point is 5 degrees or more.

*Crop marks drawn with computer programs cannot be used as crop marks by this machine.

6 Send the cutting data from the computer.

Making Corrections for Printing

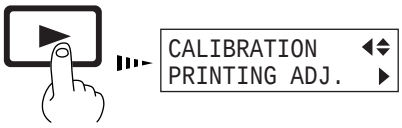
Feed Correction

This corrects for errors in the amount of feed of the grit rollers due the type of material.
Be sure to make this setting when you have replaced the material with a different type.
Correcting the amount of feed improves the dot-positioning accuracy in the feed direction, which can help enhance image quality.

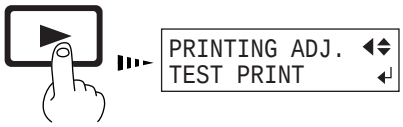
When performing test printing for feed correction, load the material correctly (see "Setup for Printing -- Loading the Material"). If the material is not loaded correctly, an accurate test pattern may not be output.

1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

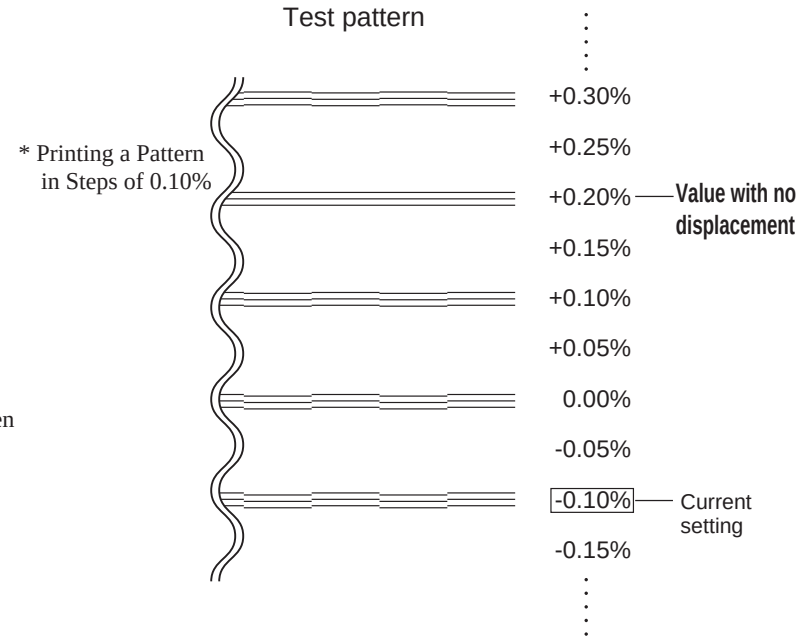
2 Press the [►] key to make the following screen appear on the display.



3 Press the [►] key to make the following screen appear on the display.

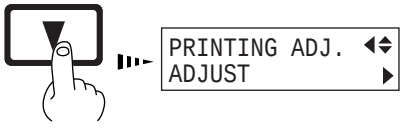


4 Press the [ENTER] key to start printing a test pattern.

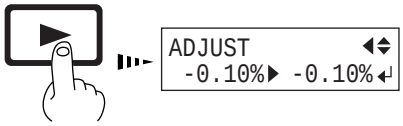


5 Check the test pattern and choose a value with no displacement.

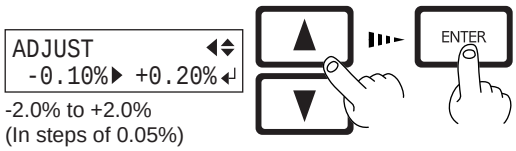
6 Press the [▼] key to make the following screen appear on the display.



7 Press the [►] key to make the following screen appear on the display.



8 Use the [▲] and [▼] keys to set the value you checked in step 4, then press the [ENTER] key.



-2.0% to +2.0%
(In steps of 0.05%)

* Test printing prints the pattern in steps of 0.10%.

Bidirectional Correction

* Only when the printing direction at the [PRINT MODE] menu has been set to [BI-DIRECTION] (bidirectional)

This adjusts slippage when performing bidirectional printing.
Make this adjustment when you have replaced the material with a different type or adjusted the head height.

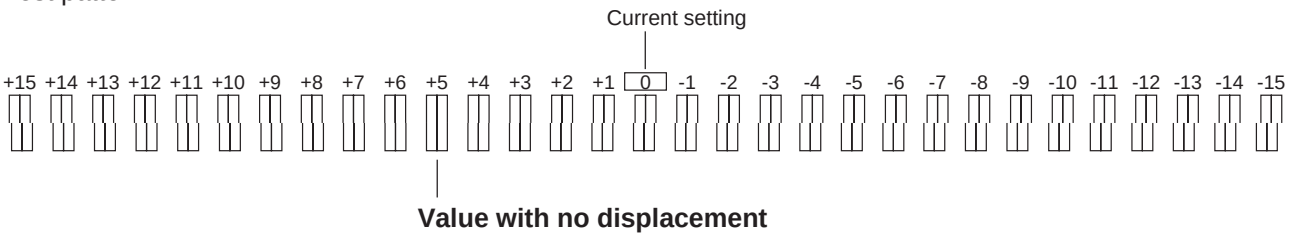
1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

2 Press the [►] key to make the following screen appear on the display.

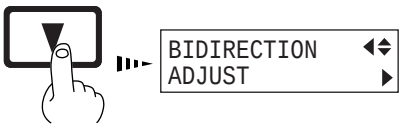
3 Press the [ENTER] key to start printing a test pattern.

4 Check the test pattern and choose a value with no displacement.

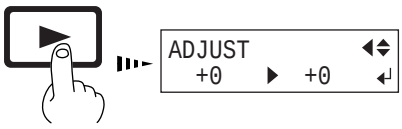
Test pattern



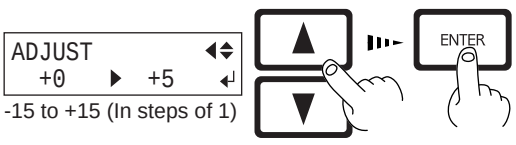
5 Press the [▼] key to make the following screen appear on the display.



6 Press the [►] key to make the following screen appear on the display.



7 Use the [▲] and [▼] keys to set the value you checked in step 4, then press the [ENTER] key.



-15 to +15 (In steps of 1)

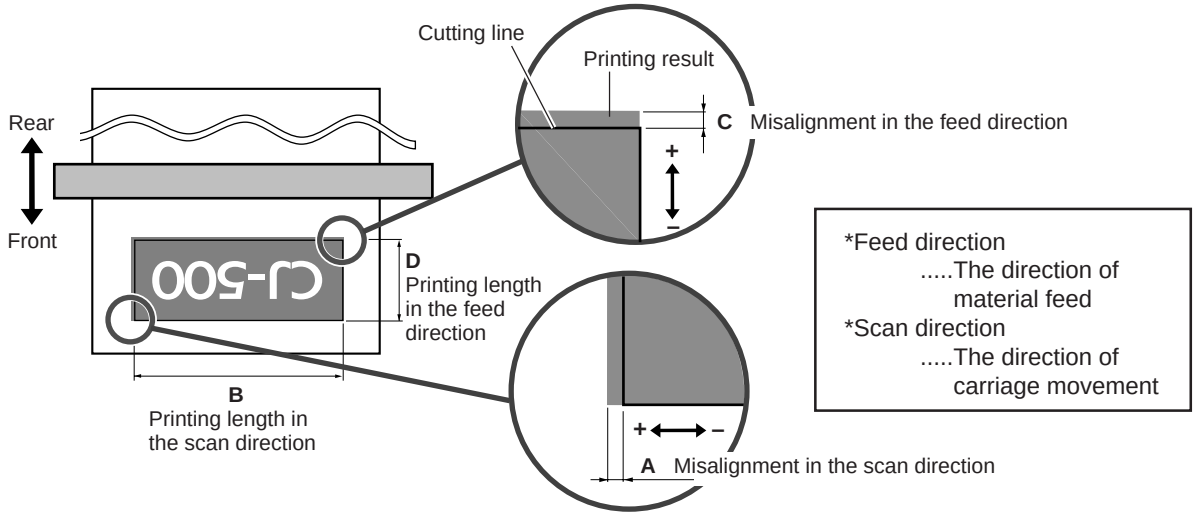
Aligning the Printing Length and Cutting Length

There is normally no need to adjust this. When there is no effect due to expansion or contraction of the material, use the machine with the calibration value always set at “0.”

However, when printing is followed by cutting, the cutting length may be displaced from the printing length.
This is because the material may absorb moisture from the ink or the air, making it expand or contract. The degree of expansion or contraction varies depending on the composition of the material, the composition of the base paper, and the temperature and humidity where installed. In general, highly absorbent materials are more susceptible to expansion and contraction.
At such times, use the display menu’s [CALIBRATION_CUTTING ADJ.] function to adjust the cutting length with respect to the printing length.
The calibration value that you set persists even after the power is switched off. After performing output, return the calibration value to “0.”

In the following case, the cutting-distance correction value is set automatically, and the setting made here is ignored.
- When the [BASE POINT] key is pressed when loading the material and the base point and align point are detected automatically

1 To calculate the correction value, measure the lengths of A, B, C and D in the following diagram.



2 Calculate the percentage of cutting-length displacement relative to the printing length.

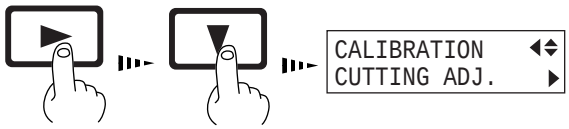
$$\text{Correction value in FEED direction.} = \frac{\text{C: Offset in FEED direction.}}{\text{D: Offset of FEED-direction data.}} \times 100$$

$$\text{Correction value in SCAN direction.} = \frac{\text{A: Offset in SCAN direction.}}{\text{B: Offset of SCAN-direction data.}} \times 100$$

* If the cutting line is in the + direction from the printing position, then input the correction as a -.
If the cutting line is in the - direction from the printing position, then input the correction as a +.

3 Press the [MENU] key and [▼] key to make the following screen appear on the display.

4 Press the [►] key and [▼] key to make the following screen appear on the display.



Continued on the next page

5 Press the [►] key to make the following screen appear on the display.

6 Use the [▼] key to choose [FEED ADJUST] or [SCAN ADJUST], then press the [ENTER] key.

7 Press the [►] key to make the following screen appear on the display.

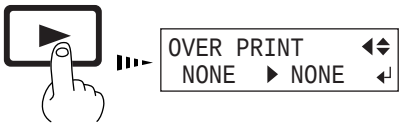
8 Input the correction value calculated in step (2). Select the correction value with the [▲] [▼] key, and press the [ENTER] key.

Performing Overprinting

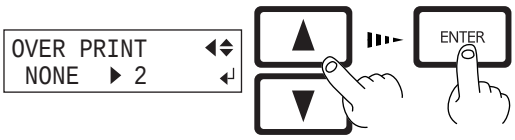
This prints the same image superimposed over the same location a number of times.
When printing materials such as fabric, colors may not come out well with just a single printing pass. Overprinting can achieve darker printing results.
You can choose either [2] (two passes) or [3] (three passes) as the number of passes for overprinting.
Performing overprinting may result in ink smudges or stretch the fabric.

1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

2 Press the [►] key to make the following screen appear on the display.

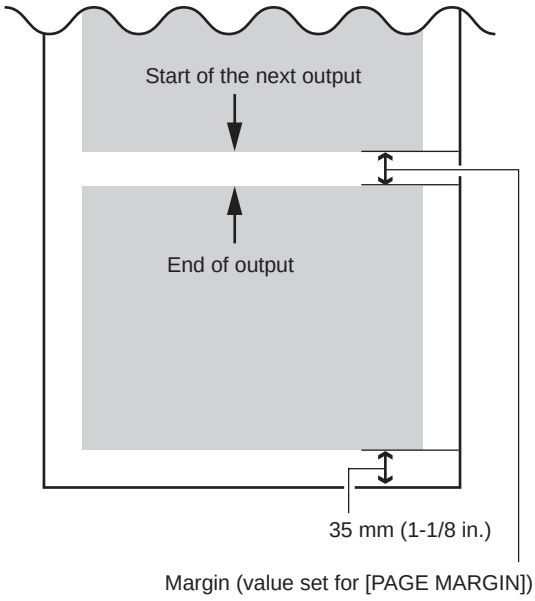


3 Use the [▲] and [▼] keys to choose the number of passes (two or three), then press the [ENTER] key.

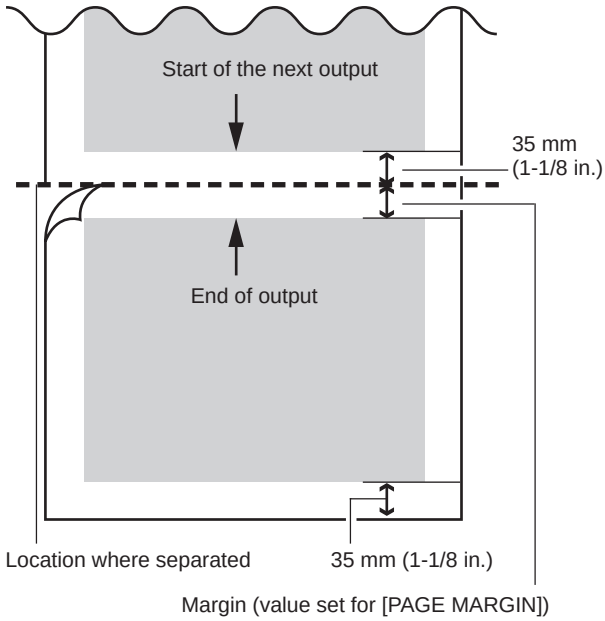


Setting the Page Margins

This sets the margin between pages.
When outputting a number of pages continuously, you can establish a margin between the pages.
You can set this in a range of 0 mm to 100 mm (in 10 mm steps).
This is set at 20 mm when shipped from the factory.



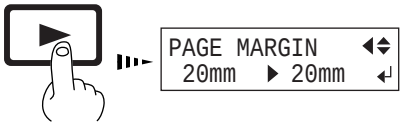
[When the material is not cut off]



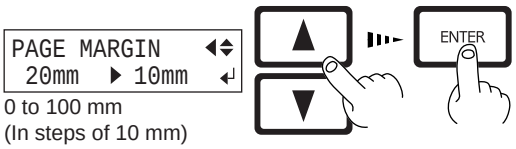
[When the material-cutting command is enabled]

1 Press the [MENU] key and [▼] key to make the following screen appear on the display.

2 Press the [►] key to make the following screen appear on the display.



3 Use the [▲] and [▼] keys to set a margin, then press the [ENTER] key.



0 to 100 mm
(In steps of 10 mm)

- When separating the material with the margin set at [0], the position where the material is separated and the end of printing/cutting may not match.
- When performing continuous printing with the margin set at [0], image quality just after starting to print may be poor on the second page or after. Also, dot drop-out or overlap may occur at the page borders.

About the Prefeed ([PREFEED]) Function

When using roll material, you can check in advance whether there is enough material available for the amount of printing or cutting data, or whether the material can be gripped correctly.
When data is sent from the computer, the amount of material equal to the length of the data is automatically pulled out, and then printing or cutting begins. If material equal to the amount of data is not available, operation pauses and the following message appears on the display.

```
SHEET TOO SHORT
      CONTINUE?↵
```

Press the [ENTER] key to perform printing or cutting.
To cancel output, stop sending data from the computer, then hold down the [SETUP] key for 2 to 3 seconds.

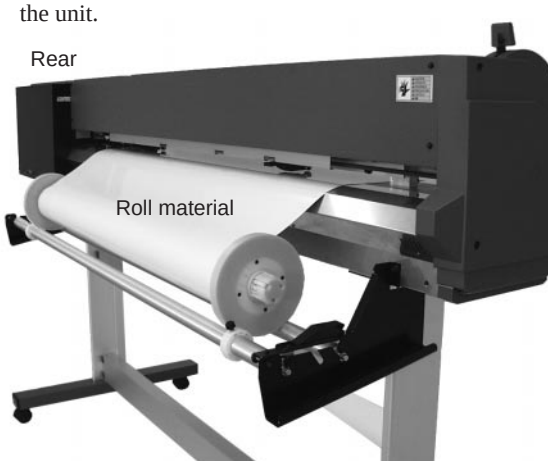
When shipped from the factory, the prefeed ([PREFEED]) function is set to [ENABLE] as the default.

When using the optional media take-up unit (the TU-500), set the prefeed ([PREFEED]) function to [DISABLE].

To Perform Long Printing/Cutting

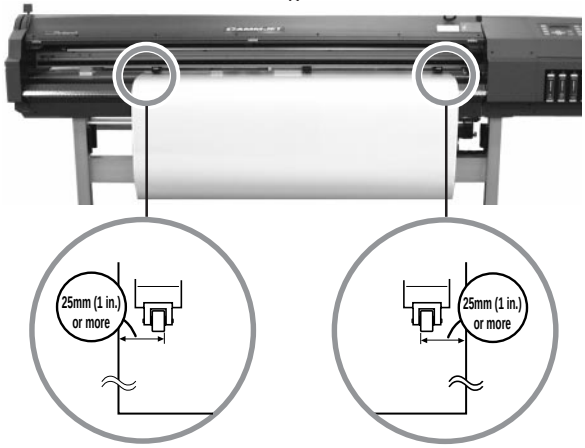
When performing printing or cutting over a length of 1.5 m (60 in.) or more, first feed out the required length of material. Then follow the steps below to load the material.

1 Pull out the material from the roll and pass it through the unit.



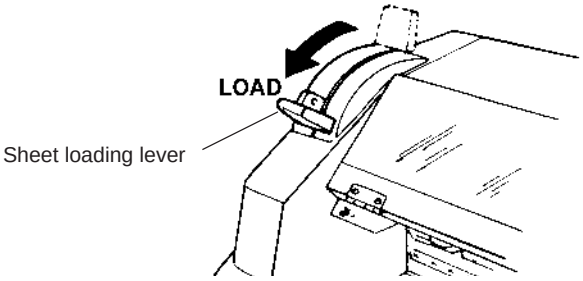
*Use material that is wider by 50 mm (2 in.) or more than the width of the printing or cutting to be performed.

2 Position the left- and right-hand pinch rollers at the locations shown in the figure.

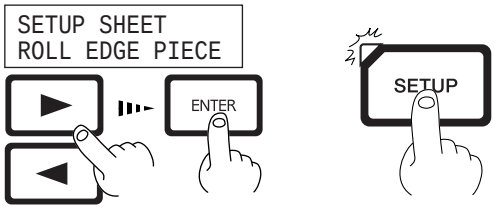


*Make sure the pinch rollers are positioned above the grit rollers.

3 Move the sheet loading lever all the way to “LOAD,” then close the front cover.



4 At [SELECT SHEET], choose [ROLL] or [EDGE], then press the [SETUP] key.



5 Press the [MENU] key and [▼] key to make the following screen appear on the display.

6 Press the [►] key to make the following screen appear on the display.

7 Use the [▼] key to select [ENABLE], then press the [ENTER] key.

8 Send the printing/cutting data from the computer.

- When using the [PREFEED] function, set [EDGE SENSE] to [ENABLE].
- Depending on the software application, the [PREFEED] function may not work.

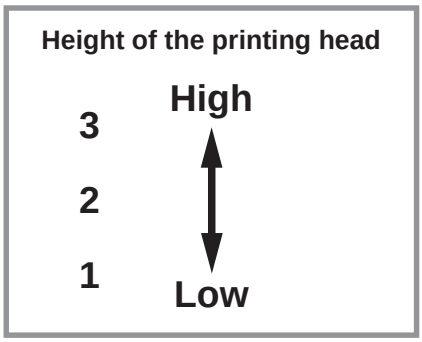
Adjusting the Height of the Printing Head

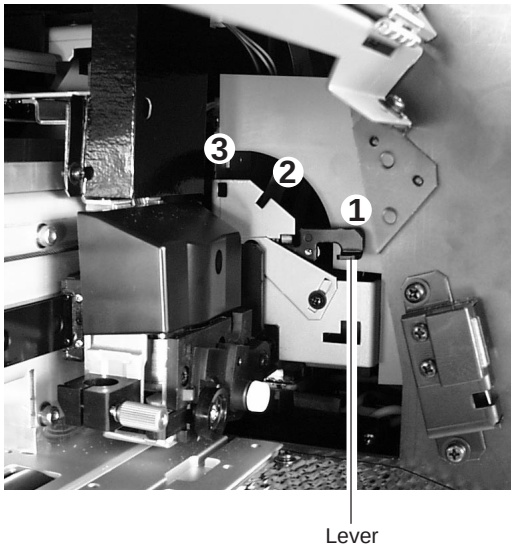
When using material that is thick or susceptible to warping, material feed may not proceed smoothly, or the material may jam. When such material is loaded, adjust the height of the printing head. You can adjust the head height by moving the lever in the figure any of the positions from 1 to 3, where it clicks into place.

This should normally be left at position 1. If printing results in jamming of the material, the material catching on a printing head, or other problems that indicate that material feed cannot be accomplished smoothly, then position the lever at 2 or 3.

.

When the height of the printing head has been adjusted, it is necessary to perform bidirectional correction (only when the printing direction for [PRINT MODE] has been set to [BI-DIRECTION]). For more information about bidirectional correction, see "Making Corrections for Printing - Bidirectional Correction."





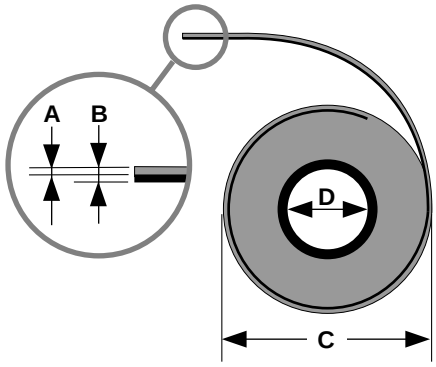
* Be sure that the carriage is in standby position before attempting to move the lever.

Materials

* Use Roland Certified media for the CJ-500.

Conditions for Usable Materials

A) Cuttable material thickness : 0.08 to 0.22 mm (0.00315 in. to 0.00866 in.) (depending on material composition)
B) Maximum material thickness, including base paper (peeled-off paper)
: Printing only 1.0 mm (0.039 in.)
: When performing cutting 0.4 mm (0.0157 in.)
C) Maximum diameter for roll material : 180 mm (7-1/16 in.) (surface to be printed or cut must face outward)
D) Core inner diameter for roll material: 50.8 or 76.2 mm (2 in. or 3 in.)
E) Maximum weight for roll material : 20 kg (44.1 lb.)
F) Roll material with a starting edge that is not taped down

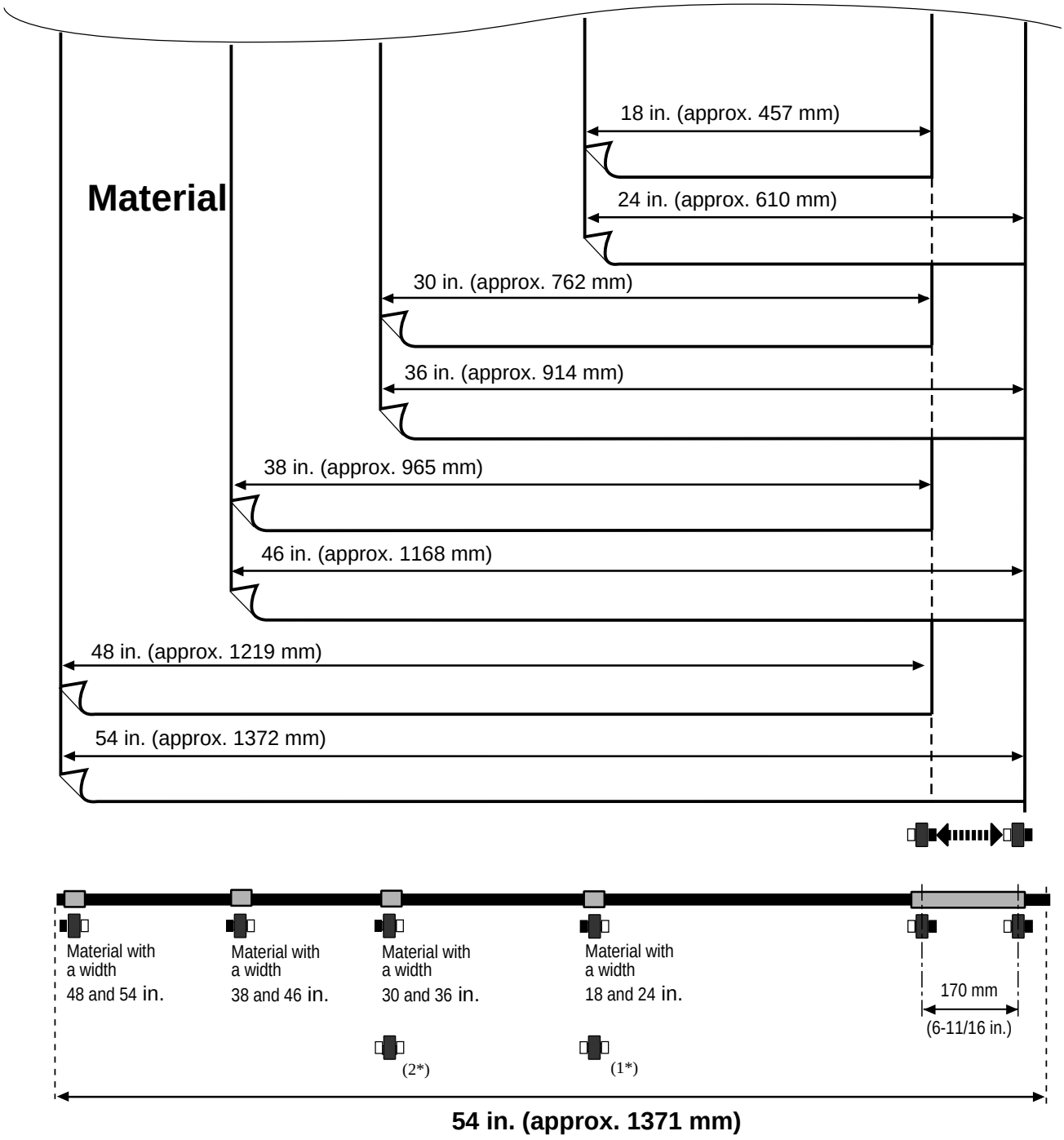


Side view of roll material

Acceptable material widths

90 mm to 430 mm (3.5 to 54 in.)

* However, when loading material with a width of 90 mm to 430 mm (3.5 to 17 in.), set the [EDGE SENSE] menu item to [DISABLE].



* Make sure the left and right pinch rollers are positioned above the grit rollers.

(1*) Position of the pinch roller (middle) when using material with a width of 30, 36, 38 and 46 in.
(2*) Position of the pinch roller (middle) when using material with a width of 48 and 54 in.
* Lowering the middle pinch roller during printing may damage the printing surface. At such times, position the pinch rollers away from above the grit rollers.

About Blade Life

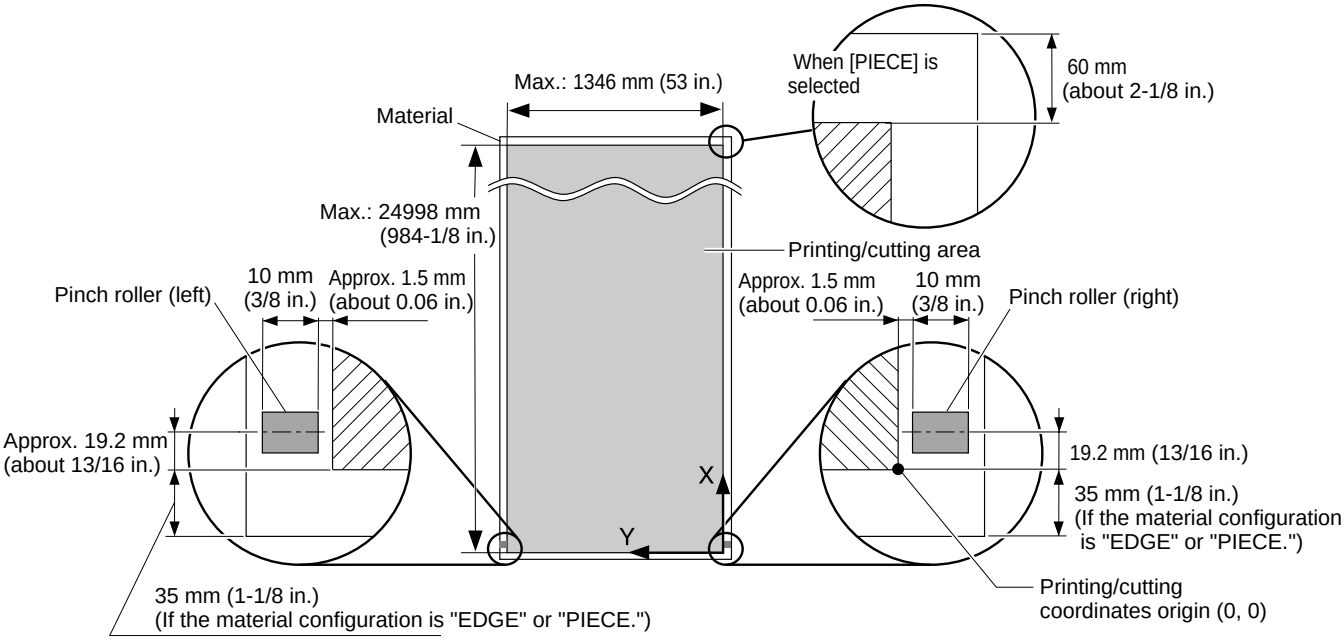
Cutting conditions and blade life vary according to the hardness of the material and the usage environment. Making the settings for the conditions described below does not automatically guarantee attractive cutting results in all situations. Before performing actual cutting, be sure to carry out a cutting test and make any necessary adjustments (see "Setup for Cutting -- Test Cutting").
If the material is not cut through completely even when the tool force is increased by 50 to 60 gf more than the tool force values shown below, it means that the useful life of the blade has ended. Replace with a new blade.

Blade	Material	Tool-force	Amount of cutter offset	Life of a blade (General guide)
ZEC-U1005	General Signage Vinyl	50 — 150 gf	0.25 mm (0.01 in.)	8000 m
ZEC-U5025	General Signage Vinyl	30 — 100 gf	0.25 mm (0.01 in.)	4000 m
	Fluorescent Vinyl	120 — 200 gf	0.25 mm (0.01 in.)	4000 m
	Reflective Vinyl	100 — 200 gf	0.25 mm (0.01 in.)	4000 m

* The values for lifespan are intended to serve as a general guide when cutting materials of identical type.

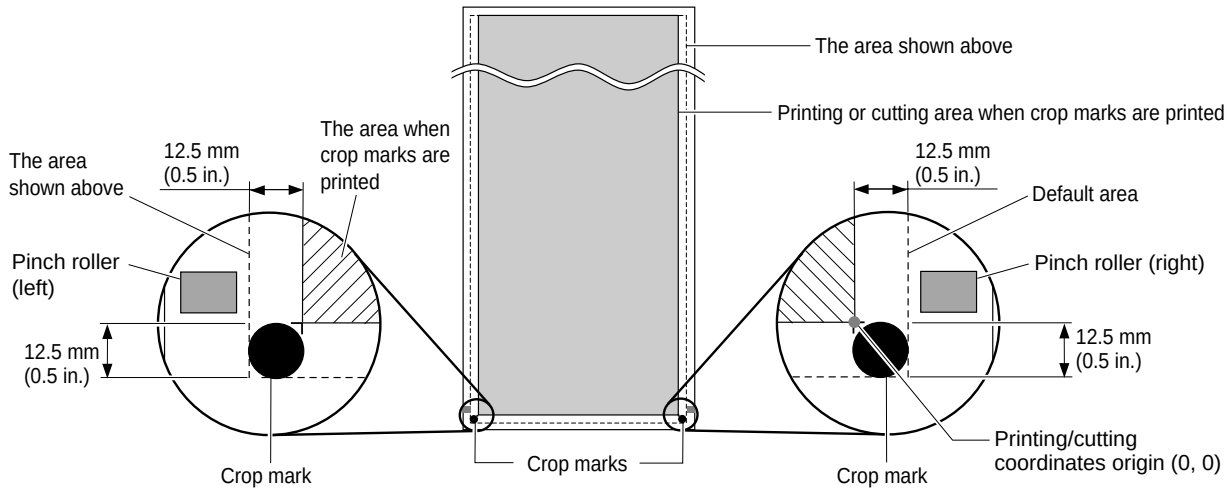
About the Printing/Cutting Area

The printing/cutting area along the horizontal plane (the direction in which the carriage moves) is determined by the position of the pinch rollers. The workable area spans the length between the two rollers, minus a margin of about 1.5 mm (about 0.06 in.) on both sides.
If "PIECE" has been selected and material length (the distance in the X direction as shown in the figure) is 2,000 mm, the area is the same as when "EDGE" has been chosen.



* The arrows in the figure indicating the X and Y directions indicate respectively the positive directions of the X axis and Y axis.

When crop marks are printed, the printing or cutting area in the area shown above is reduced by an amount equal to the size of the crop marks (12.5 mm (0.5 in.) + 12.5 mm (0.5 in.)).



Description of Keys

Key	Top menu	Submenu	Function	Setting range	Default value
	—	—	This switches on and off the sub power . When the power is switched on, the POWER LED lights up.	—	—
	—	—	This detects the presence of material, and its dimensions, and shows the printable or cuttable size on the display. The SETUP LED flashes while detection of material width is in progress. When setup finishes, the SETUP LED lights up continuously. Also press this key when removing the material.	—	—
	—	—	The [PAUSE] key pauses operation. The PAUSE LED lights up while paused. Pressing this key again cancels the paused state. Holding down the [SETUP] key for about 1 second while paused causes remaining data to be cleared and cancels the material's setup state.	—	—
	—	—	This sets the present blade position (blade center) at the printing or cutting start location (base point). For more information, see "User's Reference -- Setting the Start Point."	—	—
	—	—	This sets an align point for correction when the material is not straight. The angle of the material, referenced from the base point, is stored in memory. Any angle of 5° or less may be set. This setting is valid only when cutting.	—	—
	PRINT MODE	—	This displays the [PRINT MODE] menu for setting image quality. This is used to specify the printing quality and unidirectional or bidirectional printing. Settings cannot be made while printing is in progress. To exit the [PRINT MODE] menu screen, press the [MENU] key or the [CLEANING] key or the [SETUP] key. For more information, see "Setup for Printing -- Setting the Printing quality and Printing direction."	[PRINT MODE] PHOTO SUPER FINE FINE FINE2 NORMAL FAST DRAFT [PRINT DIRECTION] UNI-DIRECTION BI-DIRECTION	[PRINT MODE] FINE2 [PRINT DIRECTION] BI-DIRECTION
	FORCE	—	This enters the menu for setting the conditions for cutting. You can set the values for blade force, cutting speed, blade offset compensation, and tool movement speed when raising the tool. For more information, see "Display Menus Flowchart."	[FORCE] 30 to 200 gf (In steps of 5 gf) [SPEED] 1 to 60 cm/s (In steps of 1 cm/s) [OFFSET] 0 to 1.5 mm (In steps of 0.025 mm) [UP-SPEED] 1 to 60 cm/s (In steps of 1 cm/s)	[FORCE] 50 gf [SPEED] 40 cm/s [OFFSET] 0.25 mm [UP-SPEED] 60 cm/s

Key	Top menu	Submenu	Function	Setting range	Default value
SHEET CUT	—	—	This cuts off the material at the present location of the blade tip. Press this to cut off the portion already printed or cut from the roll. You cannot sever a piece of material while printing or cutting is in progress. For more information, see "Removing the Material."	—	—
MENU	—	—	This enters the menu mode. When a menu is displayed, the [▲] and [▼] keys move to the next menu, the [►] moves to a submenu, and the [◄] key moves to the previous screen.	—	—
ENTER	—	—	This is used to accept, execute, or save the item shown on the display.	—	—
◄ ▲ ► ▼	—	—	These move the material and the carriage. When a menu is displayed, these move among the menu items.	—	—
TEST PRINT	—	—	Holding down this key for 1 second or longer performs a printing test in an area of approximately 54 mm x 18 mm (2.13 in. x 0.71 in.). Before starting to print, you can carry out a test printing to check the printing quality. For more information, see "Setup for Printing -- Test Printing." If there is a problem with the state of the heads, such as dot drop-out, perform head cleaning.	—	—
CLEANING	—	—	Holding down this key for 1 second or longer performs cleaning for the printing heads. You can perform cleaning while in any state. For more information, see "Maintenance -- Cleaning the Printing Heads."	—	—
TEST CUT	—	—	Holding down this key for 1 second or longer performs a cutting test in an area of approximately 20 mm x 20 mm (0.79 in. x 0.79 in.). For more information, see "Setup for Cutting -- Test Cutting" If there are problems with the quality of cutting results for the material, press the [CUT CONFIG] key and adjust the cutting conditions.	—	—
TOOL UP/DOWN	—	—	This forces the tool to move up or down.	—	—
MENU + ⏻	MENU LANGUAGE	—	This sets the language for screen messages. You can select either English or Japanese.	ENGLISH JAPANESE	ENGLISH

Description of Menu Items

Description of Menus

Pressing the [MENU] key enters the menu mode.

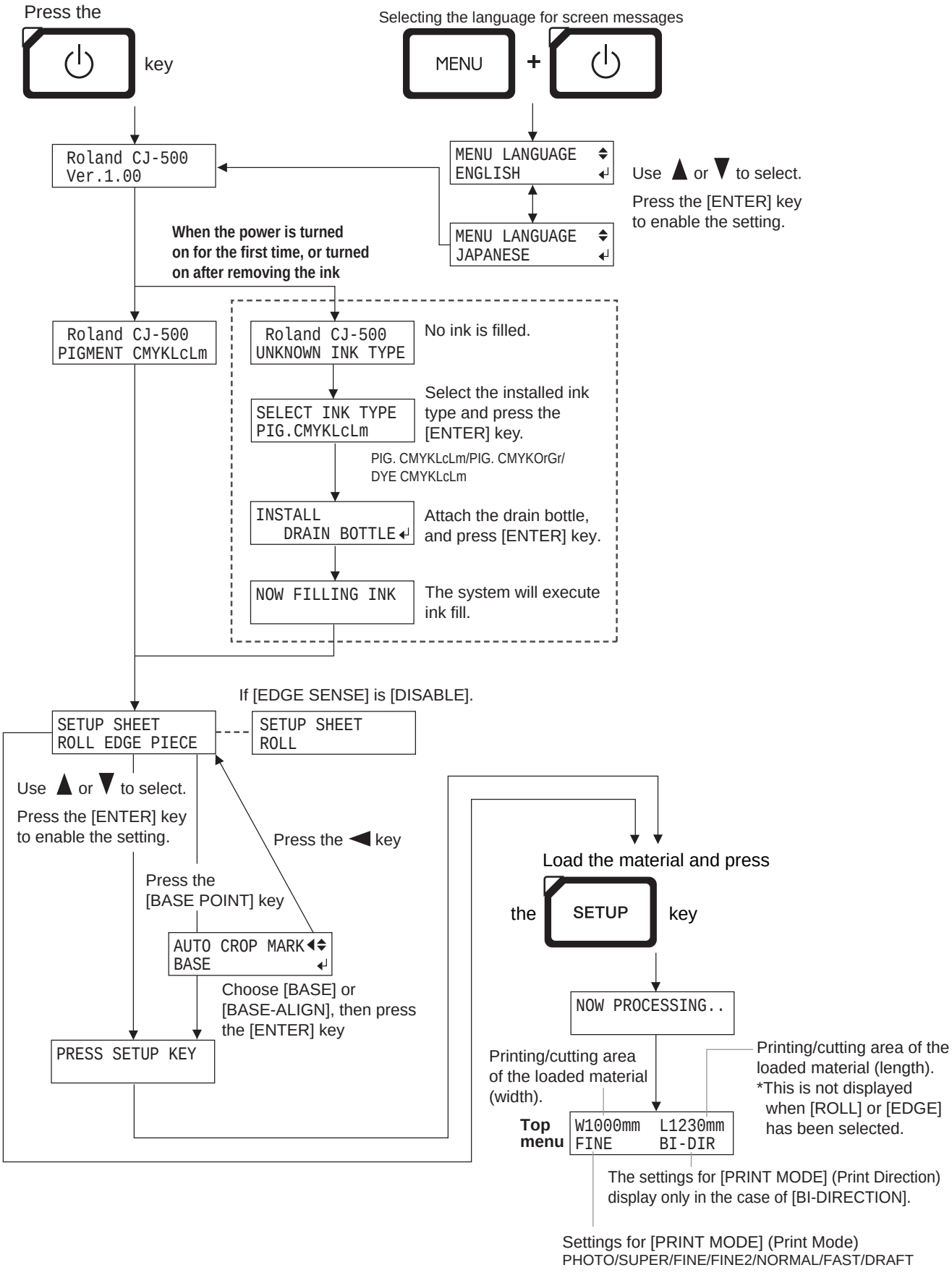
Top menu	Submenu	Function	Setting range	Default value
DEMO	PRINT & CUT	This performs printing or cutting of sample data. [PRINT & CUT]: This outputs the sample data for printing and cutting. [PRINT]: This outputs the sample data for printing. [CUT]: This outputs the sample data for cutting.	—	—
CARIBRATION	PRINTING ADJ.	This corrects for errors in the amount of feed of the grit rollers due the type of material. Be sure to make this setting when you have replaced the material with a different type. Make this setting again when horizontal stripes are plainly visible on printing results. [TEST PRINT]: This menu is for verifying the adjustment. [ADJUST]: This sets the correction value. For more information, see "User's Reference -- Making Corrections for Printing -- Feed Correction"	[PRINTING ADJ.] -2.0% to +2.0% (In steps of 0.05%)	0%
	CUTTING ADJ.	This corrects the cutting length relative to the print length (distance correction). For more information, see "User's Reference -- Aligning the Printing Length and Cutting Length" [FEED ADJUST]: This sets the adjustment value for the material-feed direction. [SCAN ADJUST]: This sets the adjustment value for the left-right direction (the carriage-movement direction).	[CUTTING ADJ.] -2.0% to +2.0% (In steps of 0.01%)	0%
BIDIRECTION	TEST PRINT ADJUST	This adjusts for slippage when performing bidirectional printing. This must be readjusted when you have replaced the material with a different type or adjusted the head height. [TEST PRINT]: This menu is for verifying the adjustment. [ADJUST]: This sets the correction value. For more information, see "User's Reference -- Making Corrections for Printing -- Bidirectional Correction."	-15 to +15 (In steps of 1)	Correction value when shipped from the factory
OVER PRINT	—	You can carry out the same printing superimposed over the same location. When printing materials such as fabric, colors may not come out well with just a single printing pass. This should normally be set to [NONE]. For more information, see "User's Reference -- Performing Overprinting."	NONE/2/3	NONE
DRYING TIME	—	This sets the drying time for the material. For materials with low absorbency that are difficult to dry, make the setting for a longer time. When printing is followed by cutting, cutting is performed after waiting for the set time.	NONE/ 10 to 990 sec. (In steps of 10 sec.)	NONE
EDGE SENSE	—	This specifies whether detection of the front and rear edges of the material is enabled or disabled. This should normally be set to [ENABLE]. When loading transparent material or material with a width of 90 to 430 mm (3.5 to 17 in.), set this to [DISABLE]. When set to [DISABLE], then during material setup only the [ROLL] selection is available.	ENABLE/ DISABLE	ENABLE
CROP MARK	—	This specifies whether output of crop marks is enabled or disabled. When set to [ENABLE], crop marks are automatically added to the data sent from the computer and printed.	ENABLE/ DISABLE	DISABLE

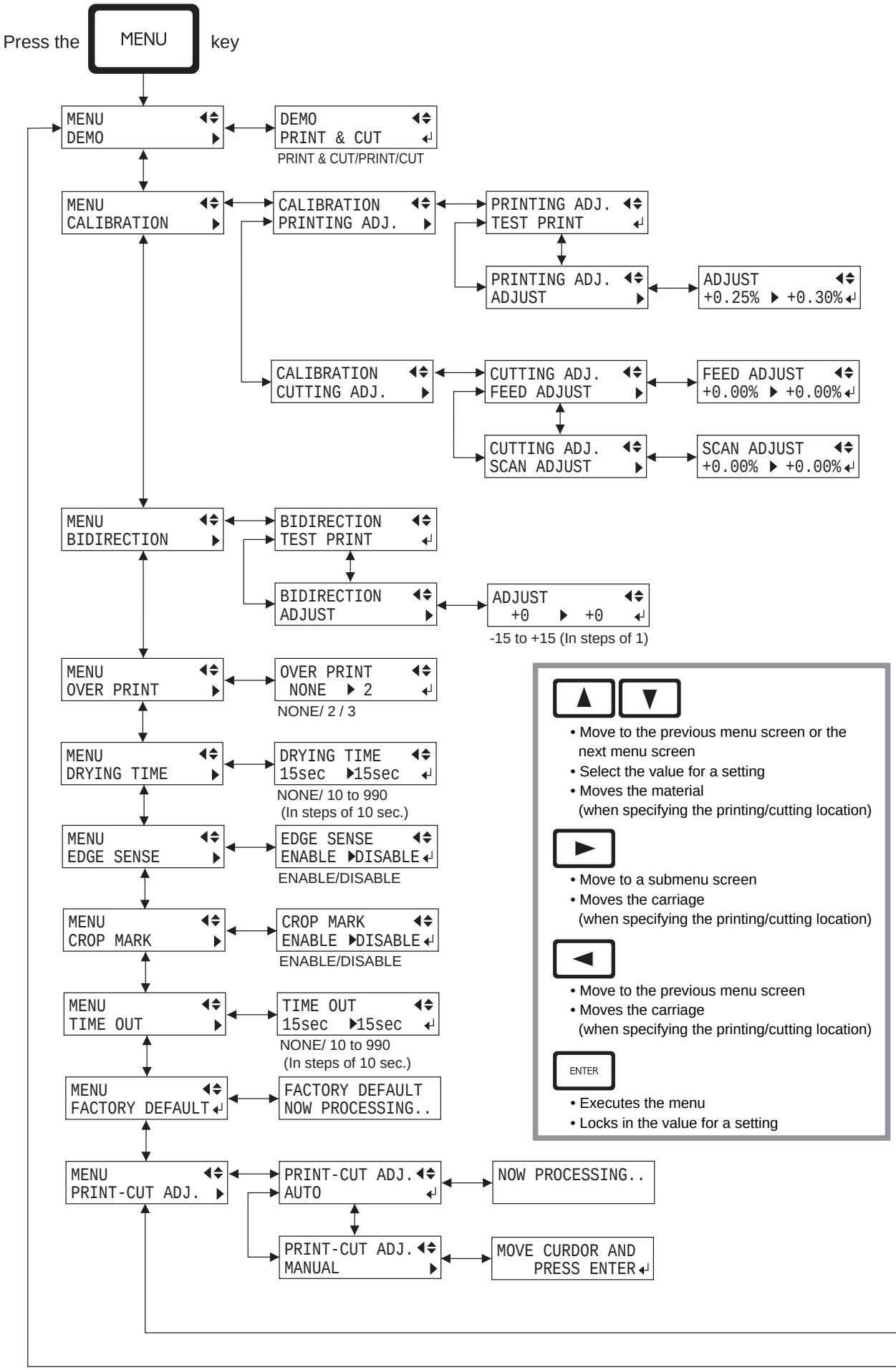
Top menu	Submenu	Function	Setting range	Default value
TIME OUT	—	When a certain amount of time passes with no data sent from the computer, the current output is considered to be finished. "TIME OUT" sets the time used for this determination.	NONE/ 10 to 990 sec. (In steps of 10 sec.)	NONE
FACTORY DEFAULT	—	This returns all menu settings to their original values when shipped from the factory. For more about the factory defaults for the various settings, see the "Default value" entry for each menu setting in this section.	—	—
PRINT-CUT ADJ.	—	[AUTO]: Alignment of the printing and cutting positions is performed automatically. [MANUAL]: Alignment of the printing and cutting positions is performed manually. For more information, see "User's Reference -- Adjusting the Printing and Cutting Positions"	AUTO/ MANUAL	—
INK CONTROL	EMPTY MODE	When replacement of the ink cartridge becomes necessary while printing is in progress, this setting determines whether printing continues or pauses. This setting is used when the ink cartridge cannot be changed immediately during printing, such as during unattended operation at night. [LATER] causes printing to continue without pause even if ink refilling becomes necessary. Printing continues with the small amount of ink remaining, so the printed image may become faint as the ink runs out. In general, it should possible to perform about 1 m^2 (10 ft^2) of printing once this message appears, although the actual varies widely according to the amount of ink needed for the particular image. Printing is continued only for the data currently being printed. Operation stops after one image is output. [PROMPT] causes operation to pause immediately when the ink cartridge needs to be changed. Printing is resumed by replacing the cartridge and pressing the [PAUSE] key. Please note, however, that the colors of an image in progress may no longer be perfectly matched if the unit is allowed to remain paused for two or three hours before resuming printing.	[EMPTY MODE] LATER/ PROMPT [CHANGE INK SET] PIG. CMYKLcLm/ PIG. CMYKOrGr/ DYE CMYKLcLm/	LATER
	FILL INK	[FILL INK] : Refills the printing heads with ink. Normally there is no need to do this, because refilling is automatic.		
	PUMP UP	[PUMP UP] : Drains ink from the printing heads.		
	HEAD WASH	[HEAD WASH] : This washes the printing heads with optionally available cleaning cartridges. For more information, see "Maintenance -- When Moving the Unit... ."		
	CHANGE INK SET	[CHANGE INK SET] : Performs the [HEAD WASH] and [FILL INK] operations. This is used when switching the ink type. Before running this, choose the type of ink to be used after the change. For more information, see "Maintenance -- Changing the Type of Ink."		
SYSTEM REPORT	—	This prints the current status of setting and other system information.	—	—
MENU UNIT	—	This selects millimeters or inches as the unit of measurement for the width displayed on the top menu after setting up the material. When inch display is used, values are displayed to the first digit to the right of the decimal point.	mm/INCH	mm
PAGE MARGIN	—	This makes the setting for the margin between pages. When outputting a number of pages continuously, you can establish a margin between the pages. For more information, see "User's Reference -- Setting the Page Margins."	0 to 100 mm (In steps of 10 mm)	20 mm
PREFEED	—	This specifies whether the material prefeed function is enabled or disabled. When set to [ENABLE], an amount of material equal to the size of the data sent from the computer is fed out first, and then printing or cutting are performed.	ENABLE/ DISABLE	ENABLE

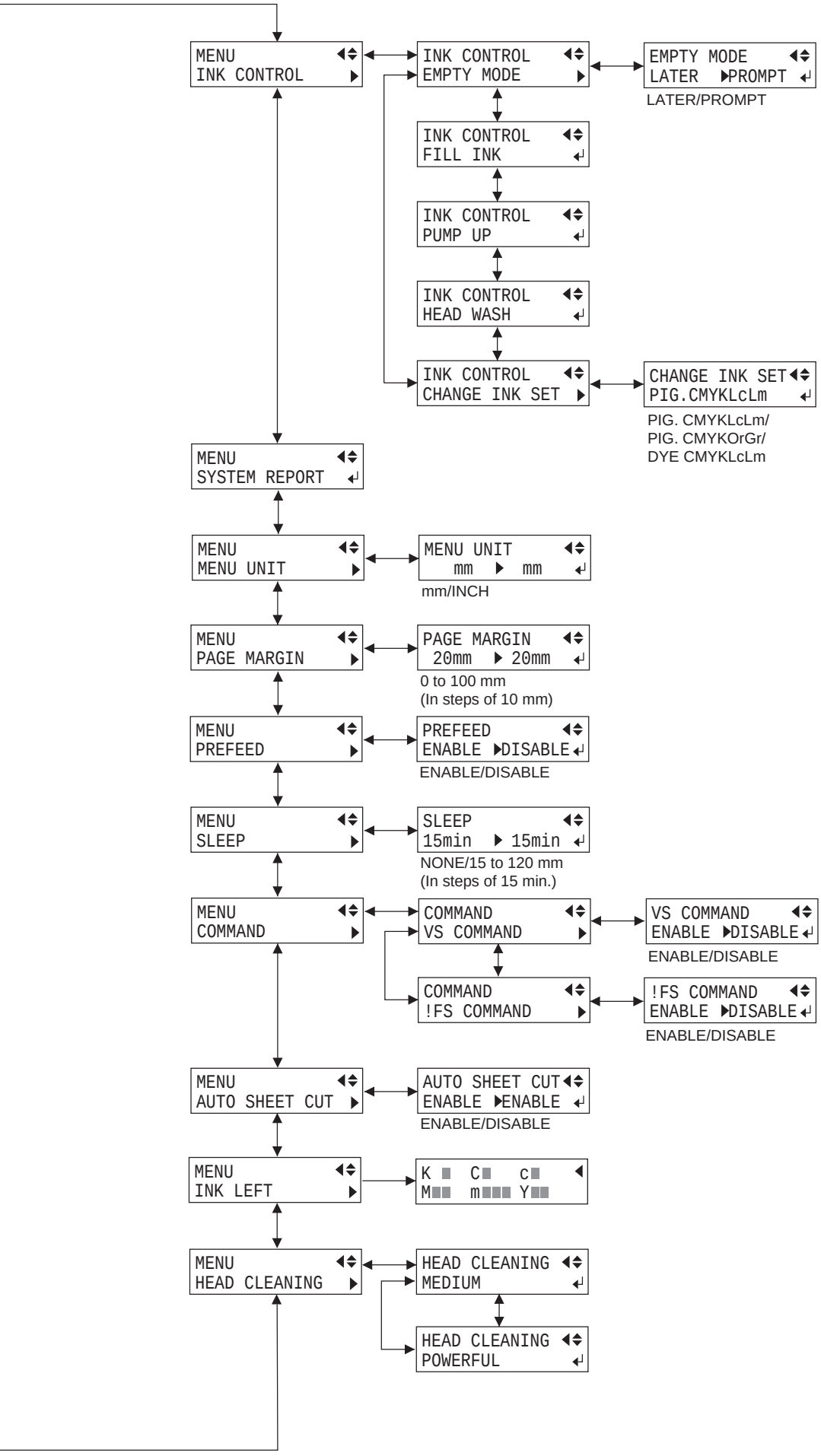
Top menu	Submenu	Function	Setting range	Default value
SLEEP	—	This sets the time that elapses before the unit enters the SLEEP mode. The SLEEP mode is enabled when the CJ-500 has been inactive for a specified time. (When in the SLEEP mode, the POWER LED flashes once per second.) To release the SLEEP mode... - Touch any key on the control panel. - Send data from the computer. - Open the front cover. - Move the sheet loading lever toward the back of the unit.	NONE/15 min to 120 min (In steps of 15 min)	15 min
COMMAND	VS COMMAND !FS COMMAND	This setting makes cutting conditions set with a software program take priority. When set to [DISABLE], cutting is performed using the values set with the CJ-500. [VS COMMAND]: To perform cutting, set the speed determined by a VS command (tool speed setting command) sent from the computer, set this to [ENABLED]. [!FS COMMAND]: To perform cutting set the tool force determined by an !FS command (tool force setting command) sent from the computer, set this to [ENABLED].	[VS COMMAND] ENABLE/ DISABLE [!FS COMMAND] ENABLE/ DISABLE	ENABLE
AUTO SHEET CUT	—	This selects whether the material-cutting command is enabled or disabled. When set to [ENABLED], the material is cut automatically when the computer sends a material-cutting command. For more information, see "Remove the Material -- Cut the material from the roll -- When sending a material-cutting command from the computer to separate the material automatically."	ENABLE/ DISABLE	ENABLE
INK LEFT	—	This shows the amount of ink left after each of the ink cartridges has been installed. The fewer the markers (" ▮ "), the less ink is left. * If a partially used ink cartridge is removed and reinstalled, or if a partially used ink cartridge is installed, the cartridge is "read" as unused, and the displayed amount of remaining ink is not true. For more information, see "Maintenance -- Check how much ink remains."	—	—
HEAD CLEANING	 MEDIUM POWERFUL	You can use the [TEST PRINT] key to perform a printing test and check the printing quality before starting to print. This also cleans the printing heads if there is a problem in the printing test. Normally cleaning is performed by pressing the [CLEANING] key on the control panel, but if doing so doesn't correct the problem, use this menu to perform cleaning. Because cleaning subjects the head to wear and consumes ink, it should only be performed when absolutely necessary. Performing cleaning from the [POWERFUL] menu in particular subjects the head to early wear and used up large amounts of ink. [MEDIUM]: This is used when performing cleaning by pressing the [CLEANING] key does not correct the problem. After cleaning, carry out a printing test to make sure there are no problems with printing quality. [POWERFUL]: Used when performing cleaning with [MEDIUM] several times does not restore the printing quality. After cleaning, carry out a printing test to make sure there are no problems with printing quality. For more information, see "MAINTENANCE -- Cleaning the Printing Heads."	—	—

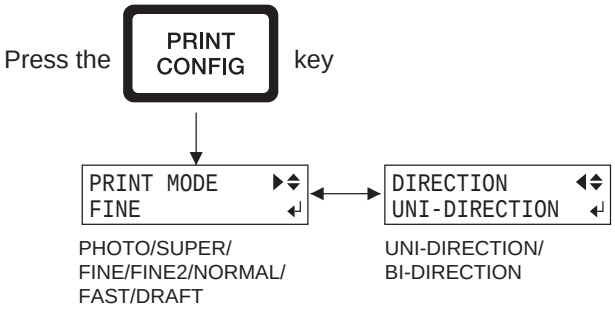
Display Menus Flowchart

For details about each of the menus, see the "Description of Display Menus."

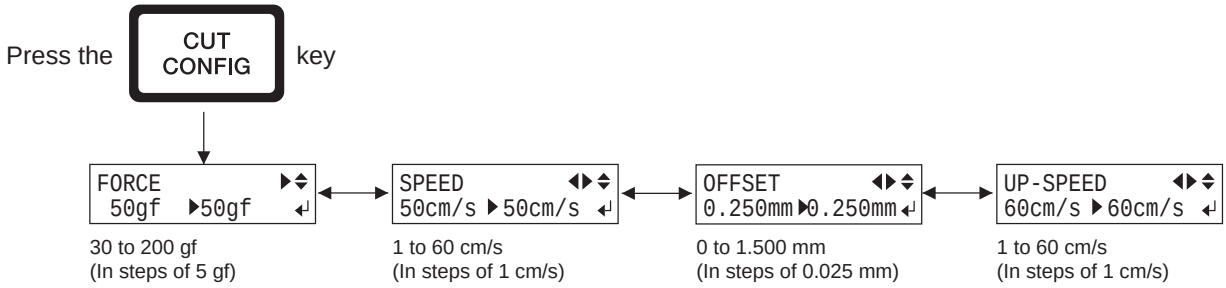



Press the
MENU
key
MENU
DEMO
DEMO
PRINT & CUT
PRINT & CUT/PRINT/CUT
MENU
CALIBRATION
CALIBRATION
PRINTING ADJ.
PRINTING ADJ.
TEST PRINT
PRINTING ADJ.
ADJUST
ADJUST
+0.25% ▶ +0.30%
CALIBRATION
CUTTING ADJ.
CUTTING ADJ.
FEED ADJUST
FEED ADJUST
+0.00% ▶ +0.00%
CUTTING ADJ.
SCAN ADJUST
SCAN ADJUST
+0.00% ▶ +0.00%
MENU
BIDIRECTION
BIDIRECTION
TEST PRINT
BIDIRECTION
ADJUST
ADJUST
+0 ▶ +0
-15 to +15 (In steps of 1)
MENU
OVER PRINT
OVER PRINT
NONE ▶ 2
NONE/ 2 / 3
MENU
DRYING TIME
DRYING TIME
15sec ▶15sec
NONE/ 10 to 990
(In steps of 10 sec.)
MENU
EDGE SENSE
EDGE SENSE
ENABLE ▶DISABLE
ENABLE/DISABLE
MENU
CROP MARK
CROP MARK
ENABLE ▶DISABLE
ENABLE/DISABLE
MENU
TIME OUT
TIME OUT
15sec ▶15sec
NONE/ 10 to 990
(In steps of 10 sec.)
MENU
FACTORY DEFAULT
FACTORY DEFAULT
NOW PROCESSING..
MENU
PRINT-CUT ADJ.
PRINT-CUT ADJ.
AUTO
NOW PROCESSING..
PRINT-CUT ADJ.
MANUAL
MOVE CURDOR AND
PRESS ENTER
• Move to the previous menu screen or the next menu screen
• Select the value for a setting
• Moves the material
(when specifying the printing/cutting location)
• Move to a submenu screen
• Moves the carriage
(when specifying the printing/cutting location)
• Move to the previous menu screen
• Moves the carriage
(when specifying the printing/cutting location)
ENTER
• Executes the menu
• Locks in the value for a setting


MENU
INK CONTROL
INK CONTROL
EMPTY MODE
EMPTY MODE
LATER ▶PROMPT
LATER/PROMPT
INK CONTROL
FILL INK
INK CONTROL
PUMP UP
INK CONTROL
HEAD WASH
INK CONTROL
CHANGE INK SET
CHANGE INK SET
PIG.CMYKLcLm
PIG. CMYKLcLm/
PIG. CMYKOrGr/
DYE CMYKLcLm
MENU
SYSTEM REPORT
MENU
MENU UNIT
MENU UNIT
mm ▶ mm
mm/INCH
MENU
PAGE MARGIN
PAGE MARGIN
20mm ▶ 20mm
0 to 100 mm
(In steps of 10 mm)
MENU
PREFEED
PREFEED
ENABLE ▶DISABLE
ENABLE/DISABLE
MENU
SLEEP
SLEEP
15min ▶ 15min
NONE/15 to 120 mm
(In steps of 15 min.)
MENU
COMMAND
COMMAND
VS COMMAND
VS COMMAND
ENABLE ▶DISABLE
ENABLE/DISABLE
COMMAND
!FS COMMAND
!FS COMMAND
ENABLE ▶DISABLE
ENABLE/DISABLE
MENU
AUTO SHEET CUT
AUTO SHEET CUT
ENABLE ▶ENABLE
ENABLE/DISABLE
MENU
INK LEFT
K C c
M m Y
MENU
HEAD CLEANING
HEAD CLEANING
MEDIUM
HEAD CLEANING
POWERFUL



Use ▲ or ▼ to select.
Press the [ENTER] key to enable the setting.



Use ▲ or ▼ to select.
Press the [ENTER] key to enable the setting.

What to Do If...

If the CJ-500 doesn't run...

Is the power cord connected correctly?

Connect the power cord included with the CJ-500 to the unit, and plug the other end securely into an electrical outlet. (See “Unpacking the CAMMJET -- 2 -- Setting Up and Connection” .)

Is the CJ-500 power on?

Turn on the power. (See “Unpacking the CAMMJET-- 5 -- Power up” .)

Has material been loaded (the SETUP LED is lighted)?

If the SETUP LED is not illuminated, make sure the material is loaded correctly and press the [SETUP] key to illuminate the SETUP LED.

Is the PAUSE LED lighted?

If the [PAUSE] key has been pressed and the PAUSE LED is lighted, the unit has been paused.
To resume printing or cutting, press the [PAUSE] key again. The PAUSE LED is extinguished, and printing or cutting resumes.
To terminate printing or cutting, first stop the transmission of printing or cutting instructions from the computer to the CJ-500. Then press the [SETUP] key. Hold down for about 1 second. This deletes the printing or cutting instructions that have already been sent from the computer to the CJ-500, and printing or cutting is stopped.

Is the top menu displayed?

If the top menu isn't displayed, printing doesn't start even when data is sent from the computer.

Top menu

```
W1234mm  L ---mm
FINE     BI-DIR
```

Conditions for starting printing or cutting
The material must be already set up (with the SETUP LED lighted),
and the display must show the top menu.

If another menu screen is displayed, press the [SETUP] key to go back to the top menu.
(Pressing the [SETUP] key when another menu screen is displayed does not cancel the set-up for the material.)

Are the computer and the CJ-500 linked with the right cable ?

The type of cable you need is determined by your computer. The cable which matches the model of computer being used should be selected.

Is the cable making a secure connection?

Connect securely. (See “Unpacking the CAMMJET -- 2 -- Setting Up and Connection” .)

Has the correct driver selection been made for the application software?

Select the appropriate CJ-500 driver.

If the "INK EMPTY" message appears during setup

A cartridge has run out of ink, and printing cannot be started.
If printing data is being sent, this message is displayed and the printer chirps. At the same time, operation is paused and the PAUSE LED flashes. Replace the empty cartridge with a new one and press the [PAUSE] key to start printing.

Printed Output is Unacceptable

If drop-out occurs with printed images.

Clean the printing heads (see "Maintenance -- Cleaning the Printing Heads").

Is the surface of the platen dirty or scratched?

Clean the platen (see “Maintenance -- When the Product Needs Cleaning”).

Is the material dirty?

Remove superficial soiling, then load the material.

Is the material damaged?

Clean, attractive printing is not possible if the material is damaged or warped.
Use care to keep materials from being damaged while in storage.

During printing, was the front cover opened (executing an emergency stop) or the [PAUSE] key pressed?

If operation is stopped or paused while printing is in progress, the quality of the image before and after the interruption may differ. It is a good idea to avoid pausing operation while printing is in progress whenever possible.

Is thick material in use, or does the surface of the material rub against the printing heads?

If material feed is not smooth because the material catches on the head, then adjust the height of the printing heads (see "User's Reference -- Adjusting the Height of the Printing Head").
When the height of the printing head has been adjusted, it is necessary to perform bidirectional correction (only when the printing direction for [PRINT MODE] has been set to [BI-DIRECTION]). For more information about bidirectional correction, see "User's Reference -- Making Corrections for Printing -- Bidirectional Correction."

If the type of material was changed, was feed correction performed?

Correcting the amount of feed improves the dot-positioning accuracy in the feed direction, which can help enhance image quality.
If the type of material was changed, refer to "User's Reference -- Making Corrections for Printing -- Feed Correction" and perform correction for feed.

Printing goes beyond the loaded material

Has the material been loaded at an angle?

If the loaded material is not straight, it may extend outside the printing area.
In “Setup for Printing” or “Setup for Cutting,” refer to “1 Loading the Material” and load the material correctly.

The Material is not cut properly

Are the blade and blade holder installed correctly and securely?

Install these so that there is no looseness (see “Setup for Cutting -- Installing the Cutter”).

Is the blade chipped?

If it is, replace it with a new one (see “Maintenance -- Replacing the Cutter Blade”).

Check if there are any dirty deposits on the blade.

If dirty, remove and clean the blade.

Make sure you are using an appropriate cutter force setting.

Perform a “test cut,” then adjust to the optimum cutter force (see “Setup for Cutting -- Test Cutting”).

Material feed is not smooth (slippage occurs)

Is thick material being used?

If the surface of the material rubs against the printing heads and smooth feed is impossible, then adjust the height of the printing heads (see "User's Reference -- Adjusting the Height of the Printing Head").
When the height of the printing head has been adjusted, it is necessary to perform bidirectional correction (only when the printing direction for [PRINT MODE] has been set to [BI-DIRECTION]). For more information about bidirectional correction, see "User's Reference -- Making Corrections for Printing -- Bidirectional Correction."

Does a piece of flat material touch the shaft or roll material at the back of the machine?

When loading flat material, if the material touches the shaft or roll material at the back of the machine, remove the shaft and roll material. If the material touches an obstruction while printing is in progress, normal material feed is not performed, and image quality may suffer or the material may jam.

Is the sheet material loaded at an angle? Are the left and right edges of the material not straight?

If the material is loaded at an angle or if the left and right sides of the material are not cut straight, the location of the edges may shift as feed is carried out. This may cause the material to rub against the inner side of the CJ-500 or be displaced from the printing/cutting area.

Is the roll material loaded correctly?

If the roll material is not loaded correctly, the material may come loose or advance at an angle. In “Setup for Printing” or “Setup for Cutting,” refer to “1 Loading the Material” and load the material correctly.

Has the sheet loading lever been moved all the way to “LOAD?”

If the sheet loading lever is moved only part of the way, only the right-hand pinch roller is not lowered. Make sure the left- and right-hand pinch rollers are inside the edges of the material then move the level all the way to “LOAD.”

If the material is to be advanced over a long distance,

Movable pinch roller inward slightly can help prevent the material from becoming dislodged.

The material becomes jammed

If [MOTOR ERROR : TURN OFF POWER] appears and operation stops

(1) Press the [POWER] key to switch off the sub power.
(2) Remove the jammed material. Cut off any creased or torn portions.
(3) Press the [POWER] key to turn on the sub power.
(4) Correct whatever caused the material to jam.
(For example, if thick material has been loaded, then adjust the height of the printing heads.)
(5) Load the material and carry out setup.
(6) Press the [CLEANING] key to perform head cleaning (see “Maintenance -- Cleaning the Printing Heads”).
(7) Press the [TEST PRINT] key to perform a printing test (see “Maintenance -- Cleaning the Printing Heads”).
(8) Send the printing data and perform printing.

* Jammed material may damage or soil the printing heads. Be sure to perform head cleaning first before sending the printing or cutting data.

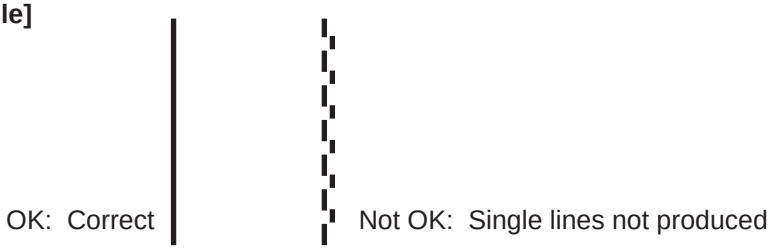
When printing was continued, but should be started over

(1) Press the [PAUSE] key to pause operation.
(2) Stop sending data from the computer.
(3) Press the [SETUP] key. Hold down for about 1 second (making the SETUP LED go dark).
(4) Press the [POWER] key to switch off the sub power.
(5) Remove the jammed material. Cut off any creased or torn portions.
(6) Press the [POWER] key to turn on the sub power.
(7) Correct whatever caused the material to jam.
(For example, if thick material has been loaded, then adjust the height of the printing heads.)
(8) Load the material and carry out setup.
(9) Press the [CLEANING] key to perform head cleaning (see “Maintenance -- Cleaning the Printing Heads”).
(10) Press the [TEST PRINT] key to perform a printing test (see “Maintenance -- Cleaning the Printing Heads”).
(11) Send the printing data and perform printing.

* Jammed material may damage or soil the printing heads. Be sure to perform head cleaning first before sending the printing or cutting data.

Printed lines are misaligned

[Example]



If misalignment like in the example occurs when the printing direction for [PRINT QUALITY] has been set to [BI-DIRECTION] (bidirectional), then carry out correction at the [BIDIRECTION] menu (see "User's Reference -- Making Corrections for Printing -- Bidirectional Correction").
Be sure to make this adjustment when you have replaced the material with a different type or adjusted the head height.

The material cannot be separated

Is a blade installed in the separating knife?

If no blade is installed, then install one (see "Maintenance -- How to Replace the Separating Knife").

Is the blade dull or broken?

If the blade has become dull or broken, replace it with the replacement blade included with the unit (see "Maintenance -- How to Replace the Separating Knife").

* Some materials cannot be separated due to their composition.

The material cannot be separated automatically

Has the [AUTO SHEET CUT] menu item been set to [ENABLE]?

If the material-cutting command has been set to "enable" with the driver, then set [AUTO SHEET CUT] on the CJ-500 to [ENABLE] (see "Remove the Material -- Cut the material from the roll").

Has the material-cutting command been set to "enable" with the driver?

When the material-cutting command has not been set to "enable" with the driver, automatic separation of the material is not performed, even when [AUTO SHEET CUT] has been set to [ENABLE].

Adjustment of the printing and cutting positions was performed (automatically), but the positions are not aligned

Depending on the type of material, automatic detection of crop marks may not be possible.
In such cases, perform the alignment manually (see "Adjusting the Printing and Cutting Positions_Adjusting Manually").

Automatic setting of the base point and the align point was performed, but the positions are not aligned

Depending on the type of material and lamination performed, automatic detection of crop marks may not be possible.
In such cases, set the base point and align point manually (see "Remove the Printed Material, then Reload the Material and Perform Cutting -- Adjusting Manually").

Error Messages

Error messages	Meaning	Action
MOTOR ERROR TURN OFF POWER	A motor error occurred.	Recovery from this problem is impossible. Use the POWER key to switch the power off and back on again. After rectifying the cause of the error (a material jam or the like), switch on the power. Do not leave the unit with the carriage not in standby position.
TEMPERATURE IS TOO LOW	The air temperature where installed is lower than the ambient temperature at which the unit can operate (approx. 5°C (41°F) or more lower).	Recovery from this problem is impossible. Use the [POWER] key to switch the power off. First raise the temperature of the area where installed, then switch on the power.
INVALID SHEET SET SHEET AGAIN	The [SETUP] key was pressed even though no material is loaded. Setup was performed with no material at the correct location. [EDGE SENSE] is set to [ENABLE], but transparent material was loaded.	Load material at the correct location and press the [SETUP] key again. When using transparent material, set [EDGE SENSE] to [DISABLE] (see "Description of Menus").
SHEET TOO SMALL SET SHEET AGAIN	An attempt was made to load material that is too small.	Replace with material of loadable size.
PINCHROLL ERROR DOWN PINCHROLL	The [SETUP] key was pressed with the pinch rollers up. The pinch rollers were raised during setup.	Move the sheet loading lever all the way to “LOAD” to lower the pinch rollers, then press the [SETUP] key (see "Loading the Material").
PINCHROLL ERROR INVALID RIGHTPOS	The [SETUP] key was pressed while the right-hand pinch roller was at a location where there is no grit roller.	Position the right-hand pinch roller correctly (above a grit roller), then press the [SETUP] key.
PINCHROLL ERROR INVALID LEFTPOS	The [SETUP] key was pressed while the right-hand pinch roller was at a location where there is no grit roller.	Position the left-hand pinch roller correctly (above a grit roller), then press the [SETUP] key.
BASE POINT ERROR	An attempt was made to set the print-start location at a position beyond the printing/cutting area.	Use the arrow keys to move the carriage marker to a place within the printing area, then press the [BASE POINT] key (see "User's Reference -- Performing Printing/Cutting at the Desired Location").
ALIGN WIDTH ERROR	An attempt was made to set the align point at the same location as the base point.	Set the align point at a proper position (see "User's Reference -- Remove the Printed Material, then Reload the Material and Perform Cutting").
ALIGN ANGLE ERROR	An attempt was made to set the align point at a location with 5 degrees or more of tilt from the base point.	Set the align point at a proper position (see "User's Reference -- Remove the Printed Material, then Reload the Material and Perform Cutting").

Error messages	Meaning	Action
CROPMARK ERROR NOT FOUND	- With [PRINT-CUT ADJ.] set to [AUTO], crop marks cannot be detected. - The [BASE POINT] key was pressed during material setup to make the setting for automatic detection of crop marks, but crop marks cannot be detected.	Load the material at the correct position and perform detection of crop marks again.
CURSOR POS. ERROR OUT OF AREA	An attempt was made to perform a printing or cutting test outside the printing or cutting area.	Perform the printing or cutting test inside the printing or cutting area.
ILLEGAL SHUTDOWN TURN OFF POWER	The main power switch was turned off without first turning off the sub power with the [POWER] key.	Press the [POWER] key to turn off the sub power, then turn on the power again.

Specifications

		CJ-500
Printing/Cutting method		Piezo ink-jet method/media-moving method
Printing/Cutting area		1346.2 mm x 24998 mm (53 in. x 984-1/8 in.)
Acceptable material widths	Sheet material	90—1371 mm (3.5—54 in.) (Note that detection of the front and rear edges is not possible for material measuring from 90 mm to 430 mm (3.5—17 in.).)
	Roll material	90—1371 mm (3.5—54 in.) (Note that detection of the front and rear edges is not possible for material measuring from 90 mm to 430 mm (3.5—17 in.).)
Width of material that can be cut off		90—1371 mm (3.5—54 in.)
Conditions for usable materials		-Cuttable material thickness: 0.08—0.22 mm (0.00315—0.00866 in.) (depending on material composition) -Maximum cuttable material thickness including base paper (backing paper): 0.4 mm (0.0157 in.) -Maximum printable material thickness including base paper (backing paper): 1.0 mm (0.039 in.) (when head is raised to maximum) -Maximum diameter for roll material: 180 mm (7-1/16 in.) -Core inner diameter for roll material: 50.8 mm (2 in.) or 76.2 mm (3 in.) -Maximum weight for roll material: 20 kg (44.1 lb.)
Ink cartridges	Pigment ink	Exclusive pigment-ink cartridge
	Capacity	220 cc ±5 cc
	Color	Six colors: the four colors cyan, magenta, yellow, and black, plus either light cyan and light magenta or orange and green
	Dye ink	Exclusive dye-ink cartridge
	Capacity	220 cc ±5 cc
	Color	Cyan, magenta, yellow, black, light cyan, and light magenta
Apparent colors		16.7 million colors
Printing resolution (Printing dot resolution)		1440 dpi x 720 dpi / 720 dpi x 720 dpi / 540 dpi x 540 dpi / 360 dpi x 720 dpi / 180 dpi x 720 dpi
Distance accuracy (When printing)		Error of less than ±0.3% of distance traveled, or 0.3 mm, whichever is greater [on Roland PET-G film, print travel: 1 m (39-3/8 in.)]
Acceptable tool		Cutter (blade and blade holder): Special blade for CAMM-1 series
Cutting speed		10—600 mm/s (10—300 mm/s in the material-feed direction)
Blade force		30—200 gf
Blade offset compensation		0.000—1.500 mm (0—0.0591 in.)
Software resolution (When cutting)		0.025 mm/step (0.00984 in./step)
Distance accuracy (When cutting)		Error of less than ±0.4% of distance traveled, or 0.3 mm, whichever is greater When distance correction has been performed (when the setting for [CALIBRATION] - [CUTTING ADJ.] has been made): Error of less than ±0.2% of distance traveled, or 0.1 mm, whichever is grater
Repetition accuracy (When cutting)		0.1 mm or less (excluding stretching/contraction of the material) Range for assured repetition accuracy (*) For materials with a width exceeding 610 mm (24 in.): Length 4,000 mm (157-7/16 in.) For materials with a width of 610 mm (24 in.) or less : Length 8,000 mm (315-15/16 in.)
Repetition between printing and cutting		±0.5 mm (±0.0197 in.) max. at 25°C (excluding possible shift caused by expansion/contraction of the material and/or by reloading the material.)

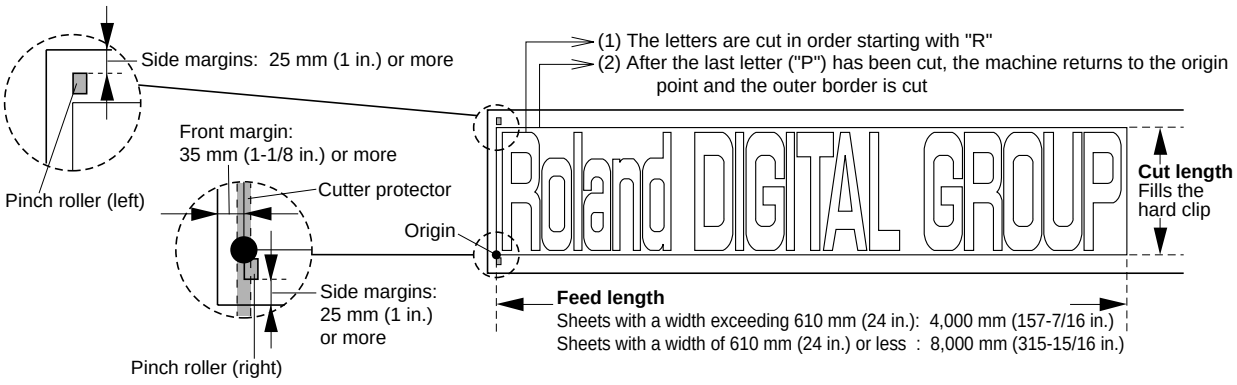
Continued on the next page

For items indicates by an asterisk "**(*)**", please see the next page.

Printing heads cleaning		Automatic cleaning and manual cleaning
Interface		Bidirectional parallel interface (compliant with IEEE 1284: nibble mode)
Instruction system		RD-GL III (Cutting), RD-RTL (Printing), RD-PJL
Power-saving function		Auto-sleep
Power consumption	Printing/Cutting mode	Maximum: 1.0A/100V—240V ±10% 50/60 Hz
	Standby mode	Maximum: 0.4A/100V—240V ±10% 50/60 Hz
Acoustic noise level	Printing/Cutting mode	64dB (A) or less (According to ISO7779)
	Standby mode	40dB (A) or less
Dimensions	Main unit	2325 mm [W] x 381 mm [D] x 428 mm [H] (91-9/16 in. [W] x 15 in. [D] x 15-7/16 in. [H])
	With stand	2325 mm [W] x 736 mm [D] x 1287 mm [H] (91-9/16 in. [W] x 29 in. [D] x 50-11/16 in. [H])
Weight	Main unit	85 kg (18.7 lb.)
	With stand	105 kg (23.1 lb.)
Environment	Power on	Temperature: 15°C to 35°C (59°F to 95°F), Humidity: 35% to 80% (non-condensing)
	Power off	Temperature: 5°C to 40°C (41°F to 104°F), Humidity: 20% to 80% (non-condensing)
Accessories		Power cord: 1, Drain bottle: 1, Drain-bottle cap: 1, Screws: 2, Blade: 1, Blade Holder: 1, Replacement blade for separating knife: 1, Cleaning kit: 1, Roland COLORCHOICE® CD-ROM: 1, Roland COLORCHOICE® installation guide: 1, User's manual: 1

(*) The following conditions must be satisfied:

- Material type: 3M Scotchcal Mastercut Film, ARLON Series 2100 (Media for cutting only)
- Special stand (Roll material must be loaded on the shaft)
- Side margins: 25 mm (1 in.) or more for both the left and right margins
- Front margin: 35 mm (1-1/8 in.) or more
  (After loading the material, when the material type to [EDGE] with the display menu, the front margin is automatically set to 35 mm (1-1/8 in.))
- The [PREFEED] function on the display menu must be set to [ENABLE]
- Cutting of the following data one time



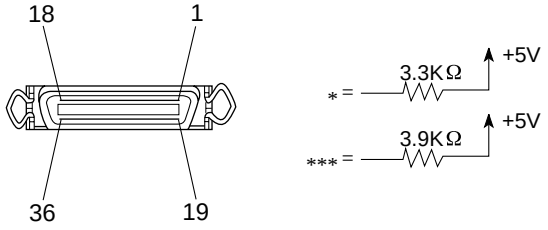
Interface Specifications

Standard	Bidirectional parallel interface (compliant with IEEE 1284: nibble mode)
Input signals	$\overline{\text{STROBE}}$ (1BIT), DATA (8BITS), $\overline{\text{SLCT IN}}$, $\overline{\text{AUTO FEED}}$, $\overline{\text{INIT}}$
Output signals	BUSY (1BIT), $\overline{\text{ACK}}$ (1BIT), $\overline{\text{FAULT}}$, SLCT, PERROR
Level of input output signals	TTL level
Transmission method	Asynchronous

Parallel Connector (in compliance with specifications of Centronics)

Signal number	Terminal number		Signal number
$\overline{\text{SLCT IN}}$	36	18	HIGH***
HIGH*	35	17	GND
NC	34	16	GND
GND	33	15	NC
$\overline{\text{FAULT}}$	32	14	$\overline{\text{AUTO FEED}}$
$\overline{\text{INIT}}$	31	13	SLCT
	30	12	PERROR
	29	11	BUSY
	28	10	$\overline{\text{ACK}}$
	27	9	D7
	26	8	D6
GND	25	7	D5
	24	6	D4
	23	5	D3
	22	4	D2
	21	3	D1
	20	2	D0
	19	1	$\overline{\text{STROBE}}$

Pin Connection



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